

JOURNAL PUBLISHED QUARTERLY

Founded in 1947

VOLUME XIVI

Spring - 1997

NUMBER 1



Quarter Century Wireless Association 159 E. 16th. Ave. Eugene, OR 97401-4017

Address Correction Requested

NON PROFIT ORG. U.S. POSTAGE PAID CORTEZ, CO PERMIT NO. 27

TUBES • LITERATURE • PARTS • SUPPLIES YOUR COMPLETE SOURCE FOR...

TUBES:

Over 3500 audio, receiving, transmitting and industrial types in stock, including many foreign and early types. We offer the complete line of Svetlana audio, amateur radio and industrial power tubes.

TRANSFORMERS:

Hard to find power, filament and output transformers as well as filter chokes for tube equipment. We feature HAMMOND performance transformers, MagneTek and Thordarson as well as many new old stock transformers.

CAPACITORS:

High voltage electrolytic and mylar capacitors, multi-section capacitors and more for tube circuits.

PARTS:

Resistors, tube sockets, potentiometers, chassis boxes and aluminum enclosures, knobs, dial belt, lamps, diodes, speakers, wire, phonograph needles and cartridges and much more.

AUTHORIZED DISTRIBUTORS FOR



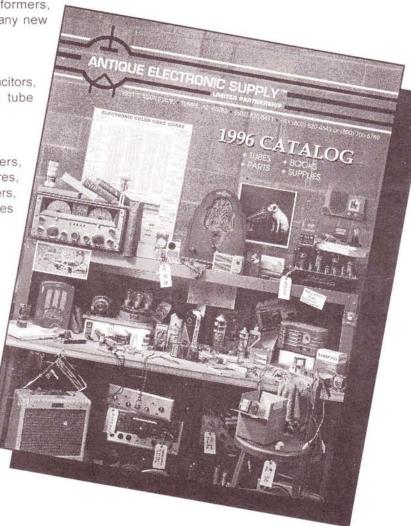


LITERATURE:

Extensive selection of literature and books on tubes, hi-fi equipment, circuits diagrams, communication gear and antique radios. Some items not available elsewhere!

SUPPLIES:

Grill cloth, cabinet restoration supplies, batteries, chemicals, tools, test meters, gifts and kits.



CALL OR FAX FOR OUR FREE 40 PAGE CATALOG

ANTIQUE ELECTRONIC SUPPLY™

LIMITED PARTNERSHIP

6221 S. MAPLE AVE. • TEMPE, AZ 85283 USA • (602) 820-5411 • FAX (602) 820-4643



Spring - 1997

QCWA JOURNAL

Volume XLVI, Number 1

Editor

Barry Wiseman, N6CSW

Contributing Editors

FCC Highlights

Jack Kelleher, W4ZC

Sylver Bells

Esther Given, W6BDE

CQ DX

Chip Margelli, K7JA

Amateur Radio Satellite News

Keith Pugh, W5IU

Business Office

159 E. 16th Ave., Eugene, OR 97401-4017 541-683-0987, FAX/BBS 541-683-4181 jwalsh@teleport.com

Editorial and Advertising Office

14643 County Road G, Cortez, CO 81321-9575 970-564-9186, FAX 970-564-9185 brw@frontier.net

From the editor

This was supposed to be my last issue - I gave my notice 2 or 3 months ago - but the new editor has not been selected yet. It looks like I'll be doing one more.

With our own magazine Electric Radio and our increased involvement in other publishing - mainly books - my wife Shirley and I are overburdened. We need to lighten our load. And we need to spend more time just enjoying ourselves.

My 2-year association with QCWA has been enjoyable and interesting. I've had the opportunity to meet and work with some of the most outstanding individuals involved in Amateur Radio. It has been a rare privlege.

I think that Amateur Radio is fortunate to have an organization like QCWA watching out for its best interests. The experience and expertise within QCWA is going to be invaluable as our hobby re-invents itself in the coming years. I see the role of QCWA becoming more and more important as time goes on.

I'm looking forward to becoming involved in QCWA again in the future. I'll be eligible for membership in 2003.

73, N6CSW

TABLE OF CONTENTS

- QCWA Officers and Board of Directors
- 3 President's Message Jack Kelleher, W4ZC
- 4 General Manager's Report Jim Walsh, W7LVN
- 5 It seems to me Lew McCoy, W11CP
- 6 CQ DX Chip Margelli, K7JA
- 8 Rules & Regs Jack Kelleher, W4ZC
- 10 Amateur Radio Satellite News Keith Pugh, W5IU
- 12 Sylver Belles Esther Given, W6BDE
- 13 Memorial Scholarship Fund Donations
- 14 Chapter Reports
- 31 Membership Application
- 32 New Members
- 35 Silent Keys
- 36 DXpeditions and American Principles: Must We Choose? George H. Shands, W9WUU
- 40 Lee Faber, W7EH A Ham for 80 Years Gerry Higgins, W7ES
- 42 QCWA Celebrates Fifty Years Wes Randles, W4COW
- 44 The First Satellite Navigation System Transit Al Brogdan, W1AB
- 47 "World Class CW Operator" Eve Sanford, W4DAI Wayne Lott, K4WJB
- 48 A TVI Story Don Meadows, N6DM
- 50 Birthdates of the Vibroplex Keys John Elwood, WW7P
- 53 Still Another Club Project Richard Berkemeyer, WØREP
- 54 In the News
- 55 Chapters on the Air
- 56 Member Classifieds

QCWA Internet HomePage

http://www.teleport.com/-qcwa/

OCWA BBS

541-683-4181

e-mail address jwalsh@teleport.com

Cover: QCWA President Kelleher and ARRL President Stafford at the Annual Luncheon meeting of QCWAs Leo Meyerson Chapter 154, Palm Springs, CA. The two Presidents discussed procedures for communication and collaboration between ARRL and QCWA on regulatory issues of mutual concern and interest and which affect all U.S. Amateurs. *Photo by W7LVN*

QCWA Officers and Board of Directors

President

John Kelleher, W4ZC, 612 Ednor Rd., Silver Spring, MD 20905-5012. 301-924-1605, Fax - 301-924-0420, w4zc@cais.com

Vice President

Gary R. Harrison, WAØRWS, P.O. Box 467, Bolivar, MO 65613-0467. 417-777-7777, Fax - 417-777-4783, gharrison@cmaster.com

Secretary

John Swafford, W4HU, 2025 N. Kensington St., Arlington, VA 22205-3209. 703-536-9537, Fax - 703-536-4668 w4hu@interramp.com

Treasurer

Herman C. H. Knief, W2YTO, Box 2516, Hendersonville, NC 28739. 704-891-4359, Fax - 704-891-7359, dukehc@juno.com

General Manager

Jim Walsh, W7LVN, 159 E. 16th Ave., Eugene, OR 97401-4017. 541-683-0987, Fax/BBS - 541-683-4181, jwalsh@teleport.com QCWA home page - http://.teleport.com/-qcwa/

President Emeritus

Chairman, QCWA Memorial Scholarship Program Leland Smith, W5KL, 10 Hawthorn Dr., Harrison, AR 72601-2302. 501-741-0473.

President Emeritus

Chairman, QCWA Finance Committee

Lew McCoy, W1ICP, 1500 Idaho St., Silver City, NM 88061. 505-388-4862, Fax - 505-538-8676, mccoy@zianet.com

Historian

Wes Randles, W4COW, 44 Western Lane, Amherst, MA 01002. (summers-May 1 - Oct 1), 6002 N. Fremont Ave., Tampa, FL 33604-6306. (winters- Oct. 1 - May 1)

Directors

Walter Brink, W3WPY, 919 Cloverfields Dr., Stevensville, MD 21666-2257. Phone/Fax - 410-643-2933, walt@friend.ly.net

Gladys Chase, W1VPF, 75 Chestnut Cir., W. Suffield, CT 06093. 860-668-0845

Robert Buus, W2OD, 8 Donner St., Holmdel, NJ 07733-2004. 908-946-8615, w2od@aol.com

Charles Dorian, W3JPT, 3521 255th Ln., SE, Apt. 19, Issaquah, WA 98029-7789. 206-391-3536, cdorian@accessone.com

John Edel, K8LBZ, 11911 66th St., N, Lot 711, Largo, FL 34643-3629. 813-532-6963, k8lbz1@juno.com

Robert S. Korfhage, W7CHI, 1205 Pleasant St., Walla Walla, WA 99362. 509-525-5438

Harry Lewis, W7JWJ, 10352 Sandpoint Way NE, Seattle, WA 98125. 206-523-9117, w7jwjw7qgp@aol.com

Bill McGrannahan, KØORB, 4826 Jarboe St., Kansas City, MO 64112-1335. 816-561-0730, Fax 816-753-7100, billmcg@qni.com

Croft B. Taylor, VE3CT, 5505 Ashton Lake Dr., Sarasota, FL 34231-6256. 941-924-4540, (winter Nov-April), 3 Weatherly Dr., Kanata, ON, Canada K2W 1A3, 613-839-3336 (summer May-Oct), croft@igs.net

John G. Troster, W6ISQ, 82 Belbrook Way, Atherton, CA 94027-6406. 415-854-3939, Fax - 415-854-3333, jmtroster@aol.com

THOSE WHO HAVE SERVED

Past Presidents

rast riesiucitis	
John DiBlasi, W2FX (SK)	1947 - 1964
Earl R. Thomas, W2MM (SK)	1965 - 1968
Clarence Seid, W2KW	1969 - 1971
Barry Goldwater, K7UGA	1972 - 1973
Frank A. Gunther, W2ALS	1974 - 1977
Harry S. Gartsman, W6ATC	1978 - 1981
Stuart Meyer, W2GHK (SK)	1982 - 1985
Leland Smith, W5KL	1986 - 1989
Harry Dannals, W2HD	1989 - 1994
Lew McCoy, W1ICP	1994 - 1996
Executive Secretary/General	Manager
Ralph Barber, W2ZM (SK)	1955 - 1964
Gus Gironda, W2JE (SK)	1965 - 1973
Ethel Smith, K4LMB	1974 - 1976
Ted Heithecker, W5EJ (SK)	1976 - 1991

QCWA JOURNAL is published four times a year (quarterly) by the Quarter Century Wireless Association, Inc. Membership in QCWA, including a subscription to the Journal, is available to individuals who qualify in the United States and its possessions at the following rates: \$20 for one year; \$35 for two years; \$50 for three years; and \$300 for life. For foreign membership rates, please contact the business office.

The Quarter Century Wireless Association and QCWA JOURNAL in no way warrant the products described or reviewed herein.

The JOURNAL does not assume responsibility for unsolicited manuscripts.

Subscription to the JOURNAL for nonmembers in the US is available for \$20 per year. Contact the business office for subscription information. The JOURNAL is available free to blind paid-up members on audio cassette tape. For more information, contact Blanche Randles, W4GXZ (May 1-October 1), 44 Western Lane, Amherst, MA 01002 (October 1-May 1), 6002 N. Fremont, Tampa, FL 33604, 813-870-0867.

The Quarter Century Wireless Association, Inc. was founded December 5, 1947, as a noncommercial association of radio amateurs organized for the promotion of interest in Amateur Radio communication and experimentation, for the establishment and advancement of the radio art and of the public welfare. QCWA is an incorporated association without capital stock chartered under the laws of the State of New York, and is a tax exempt 501(C)3 organization under the Internal Revenue Code of 1986. Its affairs are governed by a President, Vice President, Secretary, Treasurer and a Board of Directors, whose voting members are elected every two years by the general membership. In order to qualify for membership in QCWA one must have demonstrable proof of having been first licensed as an Amateur Radio operator at least 25 years prior to application for membership and must be currently licensed. Membership inquiries and general correspondence should be addressed to the business office at 159 E. 16th Ave., Eugene, OR 97401-4017 USA. Telephone, 541-683-0987. Fax/BBS, 541-683-4181.

Postmaster: Please send change of address to: QCWA, Inc., 159 E. 16th Ave., Eugene, OR 97401-4017. Printed in USA and mailed Third Class from Cortez, CO, Eugene, OR, and other cities.

President's Message

John Kelleher, W4ZC

QCWA Growth Rate

A cursory survey reveals that during the period 1991 - 1995 inclusive about 4,000 new members joined QCWA. During that same period the number of Silent Keys was about 2,200. Our active membership should have increased by the difference, or about 1,800. It didn't. We need to find out why this was so, and how to minimize this loss. We hope we can discover why hams decide not to remain members, and take steps to make membership more attractive.

Director McGrannahan has pointed to the recruitment contest and the QSO parties as ways to improve QCWA's growth rate and visibility. Nevertheless, he senses that QCWA is not growing at an acceptable rate, and poses these questions which we will address at our spring Board meeting:

Does QCWA's image need a face lift?

How do we appeal to the "coming-up" generation?

CW Status

Those who favor the status quo for CW have been encouraged by recent events. IARU Region 1 met in Tel Aviv in October. According to an article in QST for December 1996, "Based on a review conducted by another working group, the Conference recommended no changes to Article S25 of the international Radio Regulations." (S-25, dealing with the Amateur and Amateur Satellite Service, includes a requirement for demonstrating Morse code proficiency to operate an amateur station below 30 MHz).

The long range planning Committee established by ARRL to review S-25, among other things, also recommended that the Morse proficiency requirement be retained, and the ARRL Board approved the recommendation at its meeting in January '97.

We may have won a battle, but we have NOT won the war! The conference is nearly three years away, and there is no inkling at this time that the majority of the approximately 175 countries which are members of ITU will vote for retention.

Cooperation

I am to meet with the President of the ARRL in February, to discuss how we and the League can cooperate to strengthen the voice of the U.S. amateur, not only in matters like the CW issue, but in other areas where we have valuable expertise.

Speaking of other areas, the aforementioned ARRL longrange planning committee also recommended a change in U.S. amateur licensing structure.

The ARRL Board decided to seek League members' comments on the proposal, with a deadline of 31 May, before the matter is considered by the Board.

The details are scheduled to be published in the March issue of QST.

Many QCWA members are also members of ARRL. We urge you to read these proposals and comment on them to the League. Your comments should be polite, objective, and rational. Dave Sumner (EVP of ARRL) said, in seeking members' comments on attempts to "steal" our 2-meter and 70-cm bands "the objective is to educate and persuade, not to intimidate".

The Journal

We are looking for a new editor for the QCWA Journal. The present editor, Barry Wiseman, has resigned because of an increasing workload from his own magazine, Electric Radio, and his expanding book publishing business. He and his wife Shirley are also looking forward to having a little free time to devote to recreational activities.

We already have a couple of candidates for the position; but if any of our members can offer additional candidates who can match the quality of the Journal at a competitive price, we would like to hear about them.

Nominations

It seems that we scarcely seat a new panel of Officers and Directors when we commence looking for the next group. Director Bill McGrannahan, KØORB, has been appointed Chairman of the nominating Committee to seek candidates for the 1998 election. As you may know, Officers and Directors pay their own travel to Board meetings and Conventions. Directors' out of pocket expenses for communications etc., are reimbursed up to \$100 a year; Officers receive larger reimbursements. If you are interested, please contact Bill directly.

"Camaraderie"

One of the enduring objectives of QCWA mentioned in my fall '96 column is how to maintain and enhance camaraderie among QCWA members. This is easier said than done, especially for at-large members who do not have the advantage of a Chapter for an occasional "eyeball" with other members.

Some Chapters and individuals are outstanding in this field. Please write (e-mail is acceptable) and share your experiences and successes with others. We'll put them in "Letters to the editor".

Ethel Smith, K4LMB, RIP

I wasn't as fortunate as some -- I didn't become acquainted with Ethel until about 1975. By that time she was a leader in local and national Amateur Radio activities including, of course, QCWA. (QCWA Chapter 23 (Washington area) was chartered in 1964; I resumed my ham activities in 1967 (as W4RAE), and between 1967 and 1975 I ran across Ethel wherever I went).

I became much better acquainted with Ethel as a fellow member and officer in QCWA's Northern Virginia Chapter (91) which was chartered in 1975, due primarily to the efforts of Ethel and her husband Tex Debardeleben, W4TE (now a silent key). She served in all official QCWA national officer positions except President between 1974 and 1987, when she retired due to her husband's failing health.

My recollections of Ethel are of a person never too busy to listen and offer constructive comments; always ready to assist in an endeavor, particularly one that was "people-to-people" -- picnics, banquets, memoria, etc. She was an indefatigable defender of women's rights albeit persuasively. She was one of those people who fit the description "When they made her they threw away the mold".

I wish to thank Esther Given, W6BDE for the excellent bio of Ethel which appeared in the fall 1996 issue of the QCWA Journal. W4ZC

General Manager's Report

Jim Walsh, W7LVN

All kinds of things are taking place, and even though we may not appreciate some of them, I think that down the way a bit we will find that the right choice has been made. Here at Headquarters we have had a bundle of vanity callsign notifications. First we get the information that this has happened and some of our members share with us how the call belonged to a relative and they are so proud to have been able to acquire that specific call. Others have received a new, requested call and are so happy to have been able to chuck the old call. Still others, and this is the reason we started this vanity callsign, are the members who were forced to change call signs, sometimes very often, and have finally received their first, old call back. They are really thrilled.

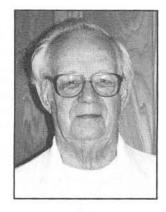
When this information arrives here at headquarters, first the data base has to be changed, and then several other files have to be changed. Finally a hand written entry must be placed on a file card, which is maintained on every member, and all of this takes time. After all of this is done, we often receive information from our member asking if we can find who held the call first and what the history might be. There is no easy way to find this information except to go book by book through our extensive callbook library. Very hard on the eyeballs!! It seems that we are the only ones who have enough reference material to find out about early calls.

Please, all of you members who have taken advantage of the vanity callsign program and received new calls, please let us know. So far most of you have done very well, but we run across one who has not notified us and then we have to go chasing to find the call we have them filed under and make the change. It is very important that we get proper notification, it is not an automatic notification just because you have received the callsign. Just remember, for the most part we do everything by callsign. An interesting problem has now developed. Today we processed a call, and up came Ted Heithecker's name. Woops !! A moment and it turns out we had just changed this chap's call, and it was W5EJ, he had met Ted and asked Ted to will his call to him when he died. So, now we must add another search item when we look for a call, so that the old calls will not come up in the search.

Of interest to some of you: I am learning a new data base program called ACCESS. It is incredibly fast and allows us to change fonts when printing various things we have to produce. One of the most important items is changing the fonts on the membership card to make them look even better. An added feature is that there is good support for this software from Microsoft. A number of our Secretaries are trying out this program so they can read our dBase files.

As I write this, our first QSO party of the year will start this weekend. There will be another in March. Check your Winter Journal for information and forms you can copy for the parties. What is great about these parties this time is that we will be talking to other than QCWA members .. sorta broadening our base of operations and spreading the good word to others in the Amateur Radio community. We will have the W2MM station on the air using both modes. I'll see some of you in that manner.

I want to take this time to say a few choice words about our Editor. Barry Wiseman, N6CSW, has been our editor for some time now and has done a marvelous job. He has been a great person to work with and we have developed some excellent transfer methods between Headquarters and his Editor's location. His vivacious wife, Shirley, is always right in there typing and helping with the publications. I said "publications" (plural) for Barry also puts out a great pub-



lication called Electric Radio, on a monthly basis. It is this extra work (ours) which has caused him to make this decision. Barry wants to expand Electric Radio and needs more time to accomplish this effort and he just does not have the time to continue to do our Journal and get this expansion on the way. We wish him well and I am sure we will hear more from time to time about Barry. W7LVN

Ethel Smith, K4LMB, Silent Key

On Wednesday morning, February 5, 1997, we received word that Ethel has become a SK. It, at this moment, seems hard to contemplate amateur radio without Ethel. She has been such a part of it since 1936 and is well known by amateurs around the world. Her picture was on the cover of the Fall QCWA Journal and a very nice article by Esther Given, W6BDE, appeared inside.

Ethel became a part of the US Navy where she did all sorts of things including installation of equipment in my beloved PBY flying machines. Eventually she ended up in the Navy laboratory of the Navy Scientific & Technical Intelligence Center from which she retired. After that she really became active in Amateur Radio with all kinds of activities, the most noted of which was her forming the YLRL group.

She married Tex DeBardeleben, W4TE, and they spent many years in amateur activities. Right after Ethel reached her 25th year in Amateur Radio she became a member of QCWA and also got involved in a Washington DC Chapter. In 1974 she became General Manager of QCWA and later became a Director and then Secretary and Vice President of QCWA. I once asked her at the appropriate time if she would run for President, and true to her self she replied .. "I don't think QCWA is ready for a woman President". Later she was appointed to the Board again to fill an unexpired term of a Director. Ethel was truly a remarkable person and I am glad that I was allowed to get to know her and share her with others. W7LVN

It seems to me

by Lew McCoy, W1ICP

It appears from the mail I received, our members would like me to continue with this column "It Seems to Me." Most of the letters were well written and all of them took issue with some of ARRL's actions and the League's trend away from - best stated as - the older traditions. I should make one thing very clear about this column - it is not being written as a continuing tirade against the League. I would like to emphasize that I see almost daily e-mail messages flowing back and forth that some amateurs want to start a new amateur organization, even trying to get various different small groups to bond together for such a purpose. To me that is a very foolish concept. What I see is needed is that some serious reorganization needs to take place within the people who run the League and that they study and come up with some reasonable goals.

I worked at the League for 32 years so have a fairly good insight as to how things work. One of my main gripes about the League's Board of Directors is how much money they appropriate for themselves and what they spend on themselves. We have all seen how dues have increased over the years - what is it coming up to now? \$34 a year? The cost of a Handbook runs about \$40. What kind of operation produces these prices? Not only with these prices but the League admits to losing \$500,000 in the last year. Just to give you a rough idea about the board expenses - let's take the average yearly directors' expense appropriations. I am going to try to be conservative in my estimates because I haven't seen the actual individual director's appropriations in recent years. But let's take what I think I know is a conservative figure - a minimum of \$10,000 per director or \$160,000. This is what I call walking around money or shaking hands money. I have no knowledge of what the officers get these days for expenses - I do know that about 10 years ago the president had an appropriation of \$25,000 per year and I have no idea what the veep gets. The average ARRL member has no knowledge of these expenses simply because the information is not publicized. Keep in mind that these expenses are for use in each individual's district. Board meetings, two or three a year, air fare, hotel bills, etc., become a separate account. Also, there are loads of different committees and these are accounted separately - any wonder the dues are so high?

Please do not misunderstand me - I realize that directors do have expenses, after all, your QCWA directors are allowed \$100 per year(!!).

As we all well know, it is very easy to complain but what really counts is offering workable solutions, not just cutting back on expenses but actually trying to eliminate the fundamental problem. I have talked to many amateurs - League members - about this problem and many of us have come up with the same idea or thoughts. Let the board of directors of ARRL become a volunteer group I know only too well that there are countless amateurs - good League members - who would be more than willing to contribute their own time and money to working for ARRL. We don't have to have \$15,000 a year expense accounts. Certainly some expenses are necessary such as board meetings and so on but let's knock off the walking around money - at least that is a start - and what's more, we know that candidates who provide their own expenses would - or should be - very honest individuals..

One other not so small item - when Doug De Maw left the League he was the last technical editor we had. How many of you have noticed the how the technical content of QST has changed? It is really pathetic from a point of view of many of us - and in case any readers wonder - Doug and I are still a life members of ARRL so we have a right and need to complain.

While I am it in complaining - let's talk about the no-code license. Just so you read me loud and clear - I am very much in favor of the license class. So what is wrong with the people coming into the hobby through that route? The answer is so simple it slaps us right in the kisser. We, the existing hams, are what is wrong with the license class. The only place these newcomers are going to get any guidance at all is from the older hams. Any of the radio clubs who put out an effort to offer guidance can show you newcomers that in every sense, make good amateurs - it is really up to us. It is apparent that League has failed in their efforts but then what else is new.

Believe me, I have been there, it is easy to sit behind the iron curtain and tell yourself everything is going well when actually the curtain is about to come crashing down!

Another point that has just come up since I wrote my first column-and that is a recent release by one of the ARRL Committee members and it appeared in the W5YI report. These are the proposals that this committee plans to present to the ARRL Board meeting in May. This report is already tearing up Amateur Radio and causing huge arguments. I won't go into the whole report but one glaring item is the changing of privileges for what is known as the Tech Plus license. These are hams who took the five word per minute exam and are different from the No Code Tech.

The proposal is to increase the phone privileges of the Tech Plus on many of the HF bands. Now here is what is, to me, glaringly stupid. One other proposal is to drop the General Class code to 10 words per minute. The ONLY difference between these two classes would be the five words per minute. If that isn't dumb, please let me know where my thinking is wrong. Let's be real honest - the Technician Class license was created to make a field of VHF-UHF experimenters. There was never any thought of them becoming HF operators - we have three classes of hams for that purpose, the General, Advanced and Extra. The entire committee proposal has little, if any, merit. Is ARRL going to make another Incentive Licensing type Boo Boo? And. I wish they would answer another simple question - are they really there for their members? I don't just doubt it - I know it. I really hate the cliche "If it aint broke--don't fix it!" If ever a cliche applied it is to our licensing structure. Certainly the system can be "fine tuned" but it certainly isn't broke.

One last item - their membership poll - as slanted as it wasstill showed that the majority of amateurs wants to maintain code requirements. Why in heck don't the powers that be listen to their members?

A personal note: For those of you that know my wife Martha, who has met many of my friends, recently went through quadruple bypass surgery. I am happy to tell all of you that she is doing fine. On the other hand - also many, many QCWA members have known Ethel Smith and the many contributions she has made to Amateur Radio - founder of the YLRL, General Manager of QCWA, director for many termswell sadly - she became a Silent Key just before her 80th birthday. We will all miss you Ethel. WIICP

CQ DX

by Chip Margelli, K7JA, DX Editor 6652 Cerulean Ave. Garden Grove, CA 92645

Heard Island: Did You Get It?

The biggest DX news in years has been the just-completed Heard Island (VKØIR) expedition, organized by the KØIR/Cordell Expedition group. They completed over 80,000 QSOs from arguably the most remote place on the planet, and are to be congratulated on an outstanding logistical and physical effort.

My own HF antennas have been down for maintenance, so after weighing the possibilities of working them on 144 MHz tropo I determined that I had better have something for HF other than my 80-meter 1/4-wave sloper (since the Los Angeles area did not have a mutual darkness window with VK \emptyset). That's when the fun (?) started. Here is my chronicle:

Day 1: Listen at work ... big pileups on 20, but can't hear them.

Day 2: Ditto

Day 4: Look at Packet Cluster. Locals starting to work them. Built 20m quad loop.

Day 5: Hurry home from work. It starts to rain.

Day 7: Hurry home from work. Put up quad loop in the dark. Look at Cluster... one guy says "Worked with 2-element beam at 29'!" Can't hear a peep.

Day 8: Determine that 20m loop doesn't have enough pattern to allow reception. Cut a chunk of wire and clamp it to top of R5 vertical to try to resonate on 30m. Look at Cluster ... no reports on 30m for past two days.

Day 9: Hurry home from work; look at Cluster. They QSYd from 30m to 15m ten minutes ago.

Day 10: Build 40-meter dipole so as to build Lazy-V. Get finished at 9 PM; no way am I climbing tower at 9 PM. Cluster reports of loud signals on 17 meters. Grrr.

Day 11: Listen at work at 5 PM: loud signals on 40 long path over Europe. Hurry home and put up 40-meter antenna. VKØIR QRT for breakfast.

Day 12 (AM): Get up early and check 40. Lots of guys calling, but I can't hear them on short path over Pacific. Resolve to move antenna.

Day 12 (PM): Hurry home and grab lower end of 40-meter antenna to move it around tower (in the dark). Wires tangle in TV antenna on tower. Free wire from TV antenna. Now top half of dipole wraps itself around guy wire and hooks itself around insulator. I damage the morals of anyone within earshot who understands Italian.

Day 13: Hurry home from work. The 40-meter dipole is still tangled, despite my request to the starlings to pull it free during the day. Go inside and watch Cluster; reports start on 30 meters. Switch to 30-meter (modified R5) antenna; signals sound very low. Go outside to find a downpour; remember that I neglected to tape up the coax connection on this "temporary" antenna. Rain stops in 2 hours; I shake water out of connector. VKØIR QRT on 30 meters now.

Day 14: Untangle 40 meter antenna; re-position it toward New Zealand for short path. Reports in afternoon about loud VKØ signal on 40-meter long path. One WB4 says, "Worked using

5W and my XYL's knitting needle stuck into antenna jack!" Grumble. Day 15: Get up early to check 40 before sunrise. XYL groans as I get up, mumbling "I thought you said you didn't need this one." Hear VKØIR well on 7007.0 MHz, running JAs. After five minutes, they go "JA PSE QRX, QRZ W6/W7" Yippee! Call for ten minutes, then I hear an argument between VKØIR and N7UA. UA wants them to QSY to 160 meters; VKØIR is



building to S6, saying "NO" to the request. After about five minutes, VKØ gives in and QSYs to 160 meters with N7UA. "Aaffffggghhhh!" Never hear them the rest of the morning. Day 16: Wake up early. XYL groans. I say "Forget the VKØ" and close my eyes.

Day 17: Get up early to check 40. Hear VKØIR about S4, running JAs. At 7:00 the operator says, "JA PSE QRX, QRZ W6/W7." Call him once. No good. Call him again. No good. Listen on FT-1000MP sub-receiver, find a clear spot. Call him again. "K7JA HI CHIP 5NN GLAD U MADE IT." Shout "Yippee!" The duck (previously sleeping in family room) starts quacking. Dog starts barking. Get back into bed. XYL groans. I get up to shut the duck and dog up. Ain't DX great?

Day 18: Look on Heard Island Home Page. Operation cut short due to storm about 12 hours after my one QSO on 40 CW!

I hope you made it into the VKØIR log with less effort than I expended.

Expose a Kid to DX

We all hear about the lack of youngsters getting into amateur radio, and that DX-ing doesn't matter to kids, and that the amateur service is dead, and on and on. I'm here to tell you that it just ain't so.

A few years ago, my company got together with a local radio club, the Western Amateur Radio Association (N6ME) of Cerritos, California and embarked upon a pilot program to bring Amateur Radio into the classroom at the Imperial Middle School in nearby La Habra. After an initial meeting with the Principal, in which details of equipment loan and antenna construction were ironed out, it was agreed that some sort of a demonstration of Amateur Radio's capabilities would be necessary in order to help the students understand what this was all about.

Now, the N6ME group had been very successful in ARRL Field Day competitions, winning their entry class nationally several times. So when ideas were proposed regarding the demonstration for the students, the ultimate solution wasn't hard to find: "Let's Do Field Day!"

Sure enough, the principal essentially agreed to have a daylong "field trip" outside on the school's own playground. The WARA club members set up six stations, each using emergency power provided by the club's generator, with FD-style antennas. The various stations each demonstrated a different aspect of Amateur Radio. There was a packet station, a CW traffic station, a 75-meter voice station, and so forth. And, of course, we had a station on 20 and 15 meters ... working DX!

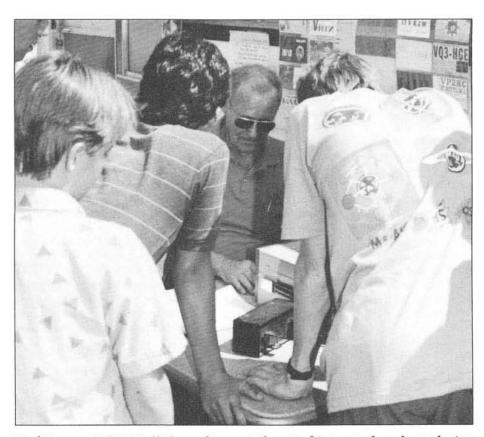
The students rotated through the various sites in groups of about 30, receiving lectures about Amateur Radio, its role in the community and in the world as a whole. Interestingly enough, two stations were particularly well remembered by the kids afterwards: the VHF packet station and the station working DX!

The late Paul Barron, N6DWR had brought out his motor home and set up a card table outside it with a nice HF station on display. One face of his motor home was festooned with QSL cards from around the world, and Paul had story after story to tell about the conversation he had enjoyed with so-and-so in Borneo, or such-and-such in Nepal, and how the QSL cards serve as a reminder of the friends you make around the world.

Tuning around 15 meters, Paul found a Spanish-speaking station that turned out to be in Venezuela. Looking around the group clustered near the operating table, he spied a young lady with a name tag that told Paul that her name was Maria. "Please, Maria, why don't you talk to this fellow, as I can't speak Spanish and I don't have a card up here from Venezuela." Of course, Paul had a shoebox full of YV QSL cards back at home, but Maria dutifully struck up a conversation with the YV, thanks to Paul's patient coaching, and after about 15 minutes it was tough to get the two of them to say "73." Can you imagine what Maria told her Mom that afternoon when she got the usual "What did you do at school today, Maria?" question?

As a result of this demonstration, an Amateur Radio course was initiated on a lunchtime "brown bag" basis. One thing led to another, and science teacher Granville Yoshina became licensed, and he's now N6RWM. Several dozen youngsters subsequently took the course as it expanded into an elective science/geography course, and they're now on the air. And the Imperial Middle School is (impatiently, of course) waiting in line for their chance to be included on the operations manifest for an upcoming SAREX (Shuttle Amateur Radio Experiment) mission, so that the students can ask questions of the shuttle astronauts, many of whom, of course, are hams.

So when someone tells you that DX has no meaning for youngsters, perhaps you should suggest that moaning and complaining are much less constructive than action. Kids get into the internet because they're hungry to communicate, and because they're curious about their planet. Amateur Radio DX operating still provides the true flavor of adventure in communications, and we should all do our part to share our hobby with the younger generation! 73 de Chip, K7JA



Paul Barron, N6DWR, (SK), working a "pile-up" of interested students during the Amateur Radio demonstration. Note the juicy QSL cards on the wall of the motor home courtesy of K7JA. Photo by K7JA.

JONES KEYS



- Machined brass mechanism.
- · Rotary ball race bearings.
- . Solid (Weight 3-1/2 lb).
- · Engraved serial number.

Model PK-200 Dual paddle (Red Base) \$170.00

Model PK-200-B Dual paddle (All Brass) \$190.00

Model PK-200-G Dual paddle (Gold Plated) \$350.00



Model PK-203 Single lever (All Brass) \$195.00



PK-205

Model PK-205 Straight Key (Red Base) \$150.00

Model PK-205-G Straight Key (Gold Plated) \$330.00

All keys add \$6 shipping/handling. Sales tax in Calif.

KEYERS

- Keys any rig.
 lambic.
- · RF proof.



Model PK-44 Electronic Keyer \$89.95 + \$6 shipping US & Canada. Tax in Calif.

- Four Memories.
- · Easy to use.
- · Does it all.



Model PK-50 Message Memory Keyer \$129.95

+ \$6 shipping US & Canada. Tax in Calif.

Send for free catalog.

PALOMAR ENGINEERS

BOX 462222, ESCONDIDO, CA 92046 Phone: (619) 747-3343 FAX: (619) 747-3346

Rules & Regs

by Jack Kelleher, W4ZC, 612 Ednor Rd., Silver Spring, MD 20905

LITTLE LEOs NARROW 2-METER FOCUS TO 146-148 MHZ (Tnx ARRL)

In their effort to secure spectrum space that includes the 2-meter and 70-cm ham bands, the Little LEOs have narrowed their focus on 2 meters to the 146 to 148-MHz segment. The industry also appears to be attempting to reposition itself as a potential emergency communication adjunct to ham radio.

The little LEOs will use low-Earth-orbiting satellites to provide position-location and two-way data-messaging services to potential customers around the world. Customers would use small, inexpensive transceivers to communicate with satellites. According to the FCC, potential uses of this service include emergency location in remote areas, environmental data collection, vehicle tracking, and time-sensitive business and personal data communication.

For Region 1, a draft little LEO frequency allocation table has proposed adding a primary mobile-satellite allocation of 146 to 148 MHz to the existing allocations for fixed and mobile (except aeronautical mobile [R] services). The table was contained in a working paper - Document IWG-2A/86 Rev. 3, entitled "New Allocations for the Mobile-Satellite Services Operating Below 1 GHz" - submitted by representatives of the Little LEOs industry to Informal Working Group-2A (IWG-2A) January 7.

The 146 to 148-MHz segment is not a ham band in ITU Region 1 (Europe and Africa), but in Regions 2 (the Western Hemisphere) and 3 Asia/Pacific), a footnote would be added to state: "Additional allocation: the bands 146-148 and 430-440 MHz are also allocated to the mobile-satellite service, limited to non-geostationary satellite systems, for use only during emergency communication situations as a complement to the amateur service in accordance with Resolution No. 640."

The little LEO proposal also calls for a new primary allocation for the mobile-satellite service (space-to-Earth) for 430-440 MHz in Regions 2 and 3 (ham radio is primary in Region 1), and offers this rationale. "The allocation for the mobile-satellite service within the bands allocated to the amateur service is intended to be a complement to that latter service in situations involving emergency communications as provided for in Resolution No. 640." As currently drawn, Resolution 640 covers only the 144 to 146-MHz segment of 2 meters and does not apply at all to 70 cm. In the 440 to 450-MHz band, where the Amateur Service is not listed in the international table of frequency allocations except by footnote (ham radio is secondary in Australia, the US, Jamaica, the Philippines, and Canada), the little LEOs proposed a new worldwide primary mobile-satellite (space-to-Earth) allocation.

Calling their service "inherently global" the little LEO group said the industry needs "frequency allocations that can be used anywhere in the world," for nongeostationary, nonvoice mobile satellite service through the year 2002. "ITU-R studies indicate sharing is possible," the industry said.

"If the demand for Little LEO spectrum cannot be satisfied by allocations that could be used on a worldwide basis, one solution is to assign different frequencies for use in the various regions of the world from within the allocations to the mobile satellite service," the working paper's preamble said. Little LEO firms CTA, E-Sat, Final Analysis, GE Starsys, and LEO One submitted the third revision of the lengthy paper--which drew criticism from the ARRL as well as from military and land-mobile interests and the National Telecommunications and Information Administration - at the January 7 session. The ARRL continued its objection to the inclusion of amateur bands and to the misapplication of Resolution 640. For now, Document IWG-2A/86 Rev.



3 is tabled, but it's expected to come up again at future meetings. IWG-2A meets on January 21 and February 4.

Overall, the little LEOs proposed the following bands for additional allocation to nongeostationary data-only mobile satellite service systems: 138-144, 146-148, 149.9-150.05, 150.05-156.7625, 380-387, 387-390, 390-399.9, 399.9-400.05, 400.15-401, 430-440, 440-450, 470-608 and 614-806 MHz. The paper notes there are proposals concerning 401-406 and 450-470 MHz and for feeder links at 1390-1400 and 1427-1432 MHz in other papers, and that "additional allocation proposals are under construction for the 174-230 MHz band." For additional information on the little LEOs situation, read the editorial" It Seems to Us . . ." by ARRL Executive Vice President David Sumner, K1ZZ, in February 1997 QST.

RF SAFETY QUESTIONS TO HIT IN JULY (See ARN 1015; also W5YI Report 15 January)

The nation's VEC's have decided to begin testing hams on the new RF exposure questions next July. This, even though the FCC had granted a years moratorium on the implementation of its new rules regulating human exposure to radio frequency energy.

When it adopted the new RF exposure rules, the FCC also put forth a requirement that additional RF safety questions be added to the Novice, Technician, Technician Plus and General class Amateur Service exams. This meant revising the Question Pool for these exam elements.

On December 1 the VECs Question Pool Committee released revised questions for Elements 2 and 3A which are to be included in examinations administered after July 1, 1997.

The new RF safety questions are intended to quiz an applicants knowledge of the hazards of exposure to strong electromagnetic fields as well as what precautions should be taken to keep himself and the general public away from harm.

ANOTHER VANITY DELAY

ARN #1015, 24 January also reports that The FCC says that it could be March before another call is issued under Gate 2 of the vanity call sign program.

No vanity calls dated since the end of last November have been processed because of what an FCC spokeswoman called unspecified computer related problems.

LATEST NEWS ON STATUS OF CW BELOW 30 MHZ.

As most of you are aware, a proposal arose at ITU WRC-95 (World Radiocommunication Conference 1995) to delete from

ITU Radio Regulations Article S25 the requirement for demonstrated Morse proficiency to operate an amateur radio station in the HF band.

Early in 1996 the American Radio Relay League and the International Amateur Radio Union established fact-finding Committees to assist them to determine U.S. and world-wide positions in the amateur community on S25.

The first of three regional IARU meetings took place in Tel Aviv last October. We were surprised to learn that at that meeting, IARU members in ITU Region 1 IARU approved a proposal to maintain the status quo on S25.5, the Morse proficiency requirement.

The ARRL fact-finding Committee reported to the ARRL Board meeting in January 1997. It recommended and the Board approved a status-quo position on \$25.5

So, within the amateur community what started out to be an assault on CW may be turning into a chorus to maintain it. Only time will tell.

Restructuring of U.S. Amateur Radio licensing structure

Another part of the ARRL Planning Committee's Report responds to its charge to review and comment on our licensing structure. Broadly, their recommendations cover these points: elimination of the Novice license, creation of a new Intermediate license to replace the Technician Plus, greater HF privileges for intermediate licensees than for the existing technician plus, including phone on 160, 75 and 15 meters, a 10-wpm General CW test (with more stringent testing standards for all CW exams), expanded phone privileges for General-class and higher licensees. Details of the plan, discussed during the recent ARRL Board of Directors meeting in Albuquerque, New Mexico, will appear in March QST. ARRL members are being invited to add their ideas, comments and recommendations to those of the ARRL WRC-99 Planning Committee, with a deadline of 31 May 1997. The Board says it seeks comments from members to ensure that before any plan goes forward, it enjoys broad support from the amateur community. The Board will not act on the issue at least until its July meeting. By the time you read this the March issue of QST will be out, with much more detail on the proposals (which were contained in ARRL Bulletin No. 5 for 1997, dated 31 January 1997.)

NTIA SAYS "MAYBE" TO NEW HF BANDS

I have just finished reading "High Frequency (3-30 MHz) Spectrum Planning Options" (NTIA Special Report NTIA 96-332, November 1996). It is the latest in a series of planning studies by the National Telecommunications and Information Administration . The Report provides a scenario for U.S. proposals which one might expect at future World Radiocommunication Conferences.

NTIA initiated a Strategic Spectrum Planning Program several years ago in response to a mandate from Congress to develop long-range spectrum plans published a Report (NTIA Requirements Study; NTIA Special Publication 94-31) addressing the requirements of 40 radio services as foreseen over the next ten years. The study concluded that eight of these services needed access to additional spectrum to satisfy user requirements to the year 2004.

The current Report addresses the spectrum availability and long-range planning options for those six services in need of additional high frequency (HF) spectrum as identified in the Requirements Study, including the Amateur Service. Under the title "Spectrum Availability for the Amateur Service" the report reiterates the amateur services' expressed requirements

of approximately 900 kHz of additional HF spectrum, and states in part: "- - - The amateur requests for international reallocations would be appropriate issues for FCC private sector advisory committees addressing U.S. preparations for future WRCs. The additional allocation near 5 MHz will require technical studies to determine the availability of these bands to support amateur use. The expansion and upgrading of amateur allocations in the 10 MHz, 14 MHz, 18 MHz and 24 MHz (bands) appear acceptable; however, this will depend on future decrease of requirements for the aeronautical mobile (R) or the fixed service internationally. The alignment of the amateur bands at 3.5 and 7 MHz worldwide will require the inclusion of these proposals in U.S. preparations for future WRCs."

Here is a brief summary of the requirements "recognized" in the Report: 3500-3800 kHz: A common worldwide exclusive amateur allocation; 4945-4995 kHz:"A new amateur service requirement for 50 kHz of shared use around 5000 kHz appears possible at 4945-4995 kHz;" 6900-7200 kHz: A requirement for 300 kHz aligned worldwide at 6900-7200 kHz needs to be addressed at U.S. preparations for future WRCs; 10,100-10,350 kHz: The amateur service requirement for this band is for a new worldwide allocation where the amateur service is primary; 14.350-14.400 kHz: The amateur service requirement is for 50 kHz of primary, exclusive worldwide amateur allocation; 18,168-18,318 kHz: The amateur service requirement for expansion of the 18,068-18,168 kHz amateur band by 150 kHz appears feasible.

We hope to see these again in U.S. preparatory activities for future WRCs. W4ZC

Robert M. Stephens, W1MM, Silent Key December 20, 1996

Born in Hastings, Nebraska on January 29, 1904, he was first licensed as 9AVC in 1919 and later held the calls W2AEW, W1JLT, W1AEW and W1MM. Bob was an All-American star quarterback for the University of Nebraska in the late 1920s and was one of the oldest lettermen from that university. He was an active booster of the Nebraska Athletic Program. He retired in 1969 after 40 years as an engineer for General Electric and supervised the design of the electric motors at the Hoover Dam project. He was a Charter Member of the Pioneer Chapter 183 (QCWA #3156) and was a recipient of the QCWA 75 Year Award. He was an active DXer with CW being his favorite mode. He was on the ARRL's DXCC Honor Roll and had 361 countries confirmed for DXCC.

Michael W. Ludkiewicz, W1DGJ, Secretary, Pioneer Chapter #183

QCWA Southern California CW Net

The QCWA Southern California CW net meets at 1100L each Sunday on 3695. Net control is W6WHM. We welcome checkins from all QCWA members. Code speeds are adjusted to speeds of the slowest members so don't let your speed prevent you from joining us. We will be looking forward to hearing you on the net. **Rob, W6WHM**

QCWA National Nets

SSB - Sunday at 2000Z on 14347 CW - Wednesdays at 2000E on 7035

Amateur Radio Satellite News

by Keith Pugh, W5IU, Vice President, Operations, AMSAT-NA, 3525 Winifred Dr., Ft. Worth, TX 76133

Out with the old, in with the new! The demise of AO-13 and the birth of Phase 3D.

INTRODUCTION -

"M QST de AO-13 *** BIRTH ANNOUNCEMENT *** 1996 Nov 20 0240 EST

My child, P3D, began "thinking" today when its IHU was activated. I'm glad I lived long enough to learn of this wonderful event. I wish P3D a long, functional life. Do not grieve for me when I'm gone. I'm only metal, plastic, & sand. My "life" came from enriching the lives of those who built, commanded & utilized me, and it's been a good "life". Danke Karl, et al. No regrets. The baton will soon be passed. AO-13 signing off."

The above message was posted to AO-13's telemetry beacon on the date shown and remained there until AO-13 died. The IHU mentioned is the Internal Housekeeping Unit which, in effect, is the "brain" of Phase 3D. The IHU was activated in the AMSAT Phase 3D Laboratory in Orlando, FL, officially starting the integration testing of the Phase 3D satellite.

This column will review AO-13's life, as I knew it, and relive the events of its last few days orbiting this earth. A few paragraphs will be devoted to a philosophy of preparation for Phase 3D, and the current Phase 3D completion and launch status. LIFE -

Prior to launch, on 15 June 1988, AO-13 was known as Phase 3C. Like Phase 3D, it started out in many different garages, basements, and laboratories worldwide. Final assembly was done in an AMSAT lab in Golden, CO. Launch was via an Ariane 4 booster from Kourou, French Guiana. After two successful firings of its "kick motor," AO-13 reached its desired orbit. Proper operation of all onboard electronics was verified and the transponders were turned on in late July, 1988, during the Central States VHF Conference. Since I was attending the conference in Lincoln, NE, I was unable to operate under my call on the first available orbit; however, a mobile VHF/UHF contest station from W9 land was able to make contacts from the convention site during the first pass. My personal operation started as soon as I returned to Fort Worth. Initial contacts were with WA2LQQ, WD4FAB, KO5I, N5BF, and KA5DWI on 1 August 1988. These contacts were on Modes "J" and "L," the modes I favored as long as they were available. Mode "B" was the most popular mode throughout the life of the satellite, but Mode "S" became popular after the loss of the 70 cm transmitter in 1993. Since the 70 cm transmitter served as the downlink for both Modes "J & L," these modes were lost at that time. My first Mode "S" contacts occurred on 17 October 1993 and were made with a homebrew three-ft. dish with a helix feed mounted on a three-ft. tripod in my front yard. The dish was hand positioned for best signal. Initial contacts were with DL1FCU, EA4LE, WD5GQM, WB6LLO, and W4FJ. A Down East Microwave Preamp and Down Converter were used to convert the 2.4 GHz signals to 144 MHz. Many hours of operation were enjoyed through this fine "bird." In later years, I conducted a number of AMSAT Operations Nets through AO-13 with checkins from all over the world. I have never been a DX chaser, but many other Amateurs were able to work DXCC through AO-13 and its predecessor, AO-10.

As early as 1989 a problem was noticed with AO-13's orbit.

Perigee altitude was decreasing at an alarming rate. Dr. Viktor Kudielka, OE1VKW, was the first to analyze the situation and identify the cause, perturbations of the orbit by low level gravitational effects of the Sun and the Moon. Viktor published his findings and a plot of Perigee Altitude vs. Time for the next several years. He predicted re-entry in late 1996. Dr. Tom Clark, W3IWI, James Miller, G3RUH, and others confirmed Viktor's analysis. From that point on, the actual Perigee Altitude agreed closely with the predictions.



By mid 1996, the effects of orbital decay were being seen in the Keplerian data. By mid October it was getting difficult to keep up with the orbit utilizing only NASA Keplerian Data. James Miller started publishing a predicted set of Keps for each orbit and continued this practice until re-entry. By late October, one could see temperature rises in the solar panel temperatures during perigee. By mid November, temperature swings from -15 deg. C to 79 deg. C were being observed. Throughout this period, I was at home recuperating from surgery so I was able to keep up with all of this even at the odd hours required.

FINAL DAYS -

The final operational days are summarized in the following note from James Miller:

"Oscar-13's Final Orbits

On perigee 6478/79, at around 1996 Nov 23 [Sat] 1140 UTC Oscar-13's solar panel #3 ceased to function due to excessive heating.

On perigee 6479/80 at around 1996 Nov 23 [Sat] 2009:30 utc panels #1,2,4,6 also stopped working, leaving only panel #5. The transponders were switched off by Graham, VK5AGR immediately after his AOS at 1996 Nov 23 [Sat] 2315 utc, orbit 6480 MA 99. Orbit 6480 continued on telemetry beacon only.

AO-13 survived perigee 6481, 1996 Nov 24 [Sun] 0432 utc, perigee altitude 107 km, monitored by insomniacs in Europe. The battery voltage was stable at 11.8 volts, much lower than the normal 14.5v. The on-board computer and related systems are regulated to 10.0v.

VK5AGR monitored the remainder of orbit 6481, but one solar panel proved insufficient to sustain a basic system, and the beacon stopped transmitting at 1996 Nov 24 [Sun] 0538:16 utc, orbit 6481, MA 34. Reset commands, which would have left an unmodulated carrier, had no effect.

On orbit 6482 in Europe, 1996 Nov 24 [Sun] 1300 utc onwards, neither of the beacons was detected, and the reset command was again ineffective.

The command stations conclude that Oscar-13 is now defunct

Re-entry is predicted for 1996 Dec 05/06 approximately, though experience with final orbits of decaying satellites indicates an enormous degree of uncertainty in these matters.

November's telemetry is archived at: ftp://ftp.amsat.org/ amsat/satinfo/ao13/telemetry/9611.zip (956kb) The final orbits are detailed therein:

File	From To	Orbit MA - MA
Q961123A.DAT	0358:25 - 1118:02	6478 25 - 243
Q961123 .DAT	1149:28 - 1334:03	6479 4 - 56
Q961123B.DAT	2301:09 - 2330:36	6480 86 - 101
Q961123F.DAT	2217:12 - 0418:22	6480 6 - 247
Q961124 .DAT	0432:22 - 0440:04	6481 0 - 4
Q961124J.DAT	0456:28 - 0459:20	6481 12 - 14
T961124 .DAT	0505:05 - 0538:16	6481 17 - 34

Much else connected with AO-13's re-entry can be studied from ftp://ftp.amsat.org/amsat/satinfo/ao13/decaykep.zip (160kb) which includes temperature plots, keplerian elements to re-entry, and other useful information.

The Oscar-13 command stations are/were: Peter, DB2OS; Graham, VK5AGR; Ian, ZL1AOX; James, G3RUH and Stacey W4SM.

They may be reached via Internet (callsign@amsat.org) and KO-23. Please remember to state a return address clearly."

James Miller went on to predict the final re-entry time and orbital conditions for the last pass:

"1996 Dec 05 [Thu] 0045 utc

Folks; I'm going to stick my neck out. I believe AO-13 will re-enter in about 9 hours from the release of this note, at the end of orbit 6542.

My integration of the equations of motion is keeping parity with Norad 2-line parameter values except for a time shift of 3h 40m. My best shot at the final orbit is: AO13-6542

1 31042U 88051B 96340.364439018 .00000000 00000-0 10000-4 0 12047

2 31042 56.8778 65.6127 0603404 62.6033 191.8761 15.25807416 65426

This was computed from an initial State Vector dated 1996 Aug 28!

"Perigee" is over the middle of America ...

Maximum drag will occur over Salt Lake City, UT. The debris, if any, ends up in the Atlantic Ocean, 830 km North of the Azores."

No reports were heard of any sightings during re-entry, but NASA was no longer able to find the "bird" after the predicted time. GOODBY AO-13!! CONGRATULATIONS James Miller on an outstanding job of providing data for the final days of AO-13 and for the final prediction as well.

PHASE 3D -

Phase 3D is still on track for a July 8, 1997, launch on the second Ariane V booster. Most of the flight electronics arrived in Orlando, FL, the week of 17 February 1997. Additional personnel and the remainder of the flight hardware will arrive by the end of February. Many tasks remain to be accomplished before "shake and bake" and shipment to Kourou. It will be a busy Spring of 1997.

Best advice for getting your station ready for Phase 3D is to spend some time looking your station over for equipment to be utilized on the "bird." Analyze your current station capabilities with the thought in mind that you will need two tunable IF boxes. Your current mode B/J station will satisfy the need for two IF strips. Think about doing most, if not all, of the additional up and down converting right up at the antenna. Also, plan your antennas with multi-band feeds and adequate separation between up and down link antennas. Remember, microwaves are not impossible to deal with. Look for articles in the AMSAT Journal and in QST this year. The Microwave bands are the life blood of Phase 3D and more people need to get active on these bands. Lets make 1997 the year of Microwave stations. W51U

Your Official QCWA Badge



Many of you have asked and now we have an official QCWA Badge for you to wear at amateur functions. It is white with black letters and the above is an actual size reproduction. This badge is totally engraved, no 'hot press', and so it should last a lifetime.

The order blank is printed below. It comes with a standard clip and a bola clip.

Note that you may order it with a pocket clip at an additional cost. It cannot come with both a pocket clip and Bola clip.

Bola ties are also available.

OCWA Badge Order

Call First Name	-
Last Name	_
Indicate whether you want your City/State or Chapter name and Number as bottom line on 1. City and State	
2. Chapter Name and Number	OR
Badge Pocket Clip (\$2.00)	\$7.00
Bola Ties (\$2.50)	
Bola tie color(circle one): Black, Blue,	
Brown, Green, Red and White Total Cost	

Complete in full and mail with your check to: QCWA,159 East 16th, Eugene,OR 97401-4017

Sylver Belles

by Esther Given, W6BDE, 6740 Evergreen Ave., Sebastopol, CA 95472

SYLVER BELLES - W6QGX

Harryette Barker's ham history goes back to 1940. Growing up in Kansas City, Missouri, close to the middle of the United States was a real ham advantage. Signals were easy to obtain in Midwest plains country and the new fangled hobby was really taking hold. One summer day in 1939 Harryette and her cousin were listening at the top end of the broadcast band (160 meters) and discovered that some high school & college students had a schedule every afternoon to talk to each other. The "mail reading" cousins soon knew all the boys' names, QTH's and activities and were fascinated by their new diversion - chasing boys by radio.

One fellow, Bob, W9FBM told of his contacts on ten meters and how exciting DX was. From that moment on, Harryette was hooked. Another Kansas City boy said to his friends one day, "I wonder if anyone is listening to us?" and gave his phone number. At the end of their QSO, Harryette called the number. The boy who answered invited her and her cousin to visit

his ham shack. They accepted the invitation and thus met other net participants.

Bob, W9FBM, had TB and his activities were limited due to illness but he served as a true "Elmer" urging Harryette and her cousin to obtain a license and telling them how to go about it.

Harryette shortly discovered that Loretta, W9OUA and her brother, W9BSP intended to start code lessons that fall in nearby Olathe, Kansas. She bought a license manual and handbook, her dad built her a key and buzzer and she started studying so she could join the class with some knowledge of its course of study.

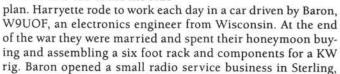
The following spring Bob, W9FMB, became a Silent Key and his mother sold his breadboard transmitter to Harryette

for \$15.00. An investment of \$29.95 produced a "Sky Buddy" receiver, her dad built an antenna tower to attach to their house and some nearby hams helped have everything ready for the day W9KSA received her license in the mail. Her dad was proud of her and greatly interested in her accomplishments but was unable himself to fathom CW. It put him to sleep. Her cousin also lost interest.

Due to her background in Amateur Radio, Harryette has been blessed with jobs in the fields of communication and electronics. She first worked at Air Communications helping build marker beacon receivers. At the onset of WW II Harryette answered an ad and was hired in Cleveland, Ohio as a Government Engineering Aide trainee. In their first electronics class they were told that only the top third of the class would be hired. Classes met six eight-hour days a week and homework and study went on until midnight. She stayed in that upper third and upon completion she was given a job at Wright Field in Dayton, Ohio.

Harryette's boss at the new assignment was also a ham and when she refused to accept a desk job, he was willing to give her a break to be the first YL to work in the laboratory. Later other girls worked in the labs thanks to Harryette's pioneering. Her last job was as senior printed circuit board designer from which she retired in 1980.

One of the innovations of WW II was the share-the-ride



Illinois, where they lived for six years adding three small daughters to the fam-

The Barker family moved to California in the early 1950's and Baron went to work for Convair (now General Dynamics). The little girls were each taught CW between the ages of 5 and 8 and left to decide if they wanted a license. Susan, AD4K, the oldest daughter was licensed at 14. She later attained extra class and commercial licenses. Susan followed in her mom's pioneering footsteps. She attended a Norwegian Captain's school for two years and on graduation served as first mate on both Norwegian and American ships. She resides in Norway and also is the mother of three daughters and a

Harryette has been an active participant in Amateur Radio ever since first licensed. She has served in official capacity in YLRL, YLRCLA, TYLRUN, is a member of QCWA and QCWW. She participated in the Powder Puff Derby both as a pilot and communicator. (She and her copilot once crash-landed in a Georgia cow pasture due to fuel line failure.) W6QGX is now the only YLRL member who has attended all YLRL conventions since their inception in 1955.

son. Her call there is LAØCY.

Another of Harryette's major accomplishments is her talent in arts and crafts. Over the years she has contributed many beautiful and original articles to the ham community as awards for individual recognition or as convention prizes.

Harryette and Baron retired to Arkansas in 1981 and immediately upon the purchase of a home put up a tri-band beam and tower and were on the air to their many friends.

In the 56 years since W9KSA put her first signal on the air, Harryette has contributed countless hours of service to Amateur Radio, made many lasting friends and never misses a schedule. W6BDE



Display with pride your personalized, enhanced

STATION ID



ID includes your personal and license data; areas of your interest; seal embossed with an amateur radio motif; color enhancement; parchment paper. It is a distinctive, official identification of your hobby.

Item #1 - With 9 X 11 wood frame for wall mounting, \$22.95 Postpaid in the US.

Item # 2 - With deluxe wood frame for surface or wall mounting. \$28.95 Postpaid in the US.

Please complete below. Print clearly as the ID will reflect your data exactly.

CALL SIGN
LICENSE CLASS(IF DESIRED)
NAME
STREETCITY
ST ZIP
DATE OF ORIGINAL LICENSE
(If original license is another call and you woulld like this shown, please
list here)
ASSOCIATED WITH (i.e. ARRL QCWA,
OOTC,DXCC, etc.)(Limit 4)
1 2
34

Mail your order to QCWA Headquarters with your check. Allow about 3-4 weeks for delivery

This is a wonderful addition for your shack and the frames are real wood and come with Plexiglas for safety and durability.

Memorial Scholarship Fund Donations

DONOR	HONORING				
CHAPT 131	W4FV				
CHAPT 79	K0CFM				
W7PN					
CHAPT 162	K9RRS				
CHAPT 120	W2UGY, W8LCU				
	& K8ONV				
CHAPT 188	W6IIF				
CHAPT 170	NA7L; W7KFM				
	& KJ7AD				
CHAPT 104	WA7FOB				
CHAPT 104	W7RZY				
B ROYLANCE	W7RZY				
CHAPT 16	LEO MEYERSON				
	SCHOLARSHIP				
W8FEC					
CHAPT 183	W1MM				
K4LMB					
W4ZC & MARGARET					
N2XJ					
W6ISQ					
K2LKH					
W8MK					
CHAPT 150					
CHAPT 168	W7MB				
KOGRM					
CHAPT 45	KR4NA				
CHAPT 82	K4ZK				
CHAPT 87	W7HGO				
CHAPT 149	W1EFW				
CHAPT 115					
CHAPT 87	KA7CHM				
CHAPT 138					
W5KL K4LMB					
CHAPT 10	W8GQZ				
CHAPT 64	W5KWH				

We talk a lot about how great the Memorial Scholarship Fund is, and how only the interest earned on the account is used to fund the grants. I often wonder how well this is received and about the time my wondering gets to a great peak .. I get an answer. There are a lot of small events that continually take place to support the Memorial Scholarship Fund, but every once in a while something exceptional takes place. Some while back we had a conversation with a widow about a grant to the Fund. Time passed with a number of communications with her by Leland Smith, W5KL, and Headquarters. After a period of time we received a letter at Headquarters and a very substantial check was enclosed for the Scholarship Fund in memory of her husband, Travis Baird, W9VQD, who was a great supporter of the Memorial Scholarship Fund. Her fond memories of Travis will continue throughout the family's lifetime and they will know they have contributed to the education of the next generation.

The scholarship fund is still growing and I'd like to remind everybody that it's time for prospective recipients to write to FAR for their QCWA scholarship packet. To make application contact FAR, 6903 Rhode Island Ave., College Park, MD 20740-3713. W7LVN

Chapter Reports

Chapter 1, Cleveland

There were 40 members and their spouses and friends who braved the subzero weather to attend our Winter luncheon-meeting. After the luncheon, Mr. Guy Zumpetta, KY8G, talked about his experiences as a ham. Then he gave an illustrated talk about the products of Bird Electronics Corporation of which he is the Marketing Communication Specialist. In the name of Bird Electronics, Guy donated a Bird RF field strength meter. It was won by Jim Wimer, N8OOG.

Old Timer George Klassen, W8MH, was found dead in his home in Euclid, Ohio on January 9th. Funeral services were held on January 17 from the East Shore Methodist Church. George was originally licensed as W8DZG in 1930. He served as engineer and supervisor for the Ohio Bell Telephone Company (now Ameritech) for 38 years. R.I.P., George, OM.

We also lost a very much liked member, Edwin Bennett, W8VVB. He died on January 29. Ed worked for Cleveland Electric Illuminating Company before retiring because of breathing problems. His family had moved to Lexington, Tennessee because of his ailment. Nevertheless he kept in touch with his buddies here via Amateur Radio. Ed was 77. Our condolences to his bereaved family.

The executive committee of Cleveland Chapter No. 1 and members were making plans to welcome member Richard Storm, SM5BVU, and his wife. The two accepted the club's invitation to come for a visit all the way from Sweden. They were scheduled to be in Cleveland early in March. Spearheading the invitation was Kirk Sanderson, W8WNA, longtime friend of Richard and fellow-member of the Odd Fellows Organization. Sanderson started their international amateur radio group years ago and is still actively participating in it.

Another visitor, back to his home town, will be Marconi Medalist and Life Fellow of the Institute of Electrical and Electronics Engineers, Mr. Al Gross. Radio Amateur, W8PAL, will be in Cleveland with his wife, to participate in the IEEE Honors Ceremony on June 28. On that occasion Dr. Pekka J. Tarjanne will be officially recognized as an IEEE Honorary Member. Dr. Tarjanne is the Secretary-General of the International Telecommunications Union (ITU). During his stay in Cleveland Mr. Gross plans to meet with his many friends of Cleveland Chapter No.1.

Joseph Zelle, W8FAZ

Chapter 5, Delaware Valley

The December meeting of the Delaware Valley Chapter 5 was held on the 7th at the Town & Country Restaurant in Bordentown, NJ. The weather was not very cooperative with heavy rain and the threat of snow. Those that braved the weather numbered 44. This meeting was the election of new officers and the slate is as follows: W3HK, George VanDyke re-elected as Chairman; K2JM, John Michel, Vice-Chairman; W2UAE, Don Field, Secretary; and W3AGC, Marv Foral, Treasurer.

The speaker for this meeting was to be WA2JZF who was to talk on Emergency Communications, but due to unforeseen circumstances, had to cancel out at the last minute leaving the meeting without an activity. However, a pleasant meeting with old friends was enjoyed by all. W3DIP, Fielding Wa-

Chapter Reports are a very important part of the Journal and we would like to see regular reports from all chapters. If your chapter is not represented on these pages, please ask your secretary to file a special report for the Journal.

Please send the reports to General Manager, Jim Walsh, to arrive no later than the following dates: August 1, November 1, February 1, and May 1.

ters, a member of the exec committee, stressed the need for more membership activity in Chapter management since the Chairmanship would like to be turned over to someone by the present chairman who has served for a number of years. W3HK has agreed to continue until a replacement is found. All successful organizations need dedicated members to take part in the operation of the organization and to donate their ideas to make it operate even better.

The meeting was saddened by the announcement of the sudden passing of K3IPC's XYL. Russ Houston and his wife Dottie have been regulars at our meetings and Dottie will be missed by all. Also W2SVV, Ceasar Arena, had to be taken to the hospital to be checked out because he was having problems with his balance and was unable to walk. We are glad to report that Ceasar is back home and has improved sufficiently so that he and his wife Betty will make a delayed trip to their winter home in Texas.

The Sunday morning Chapter Net is functioning very well and all members that have a chance to check in at 10:00 am on 3917 kHz, are encouraged to do so. W2EEQ, Russ Snedeker, is net control and there are about ten regular members who check in and a number of other QCWA members from other chapters that join in. Conditions of the band are usually pretty good and everyone enjoys the greetings and comments that bring us all up to date on each other.

An April meeting is planned and flyers will be sent out to all members giving the details of the time and place and who the speaker will be. We are planning to have a very good speaker and hope that all that were disappointed at the December meeting will come out to the April meeting.

Don Field, W2UAE

Chapter 6, Pittsburgh

The last Chapter 6 luncheon/meeting of 1996 was called to order by Chairman Jack Parsons, K3OTY on December 15th. The new meeting place, "Otto's Haufbrau House", has proven to be quite accommodating to our group. Much socializing by the attendees with discussions of where the Florida bound snow birds will connect while the rest of us shiver in the northern climes.

The traditional year end gift exchange with some holiday caroling led by Jan Lawrence added to the good cheer of the thirty members, guests and significant others in attendance. Business reports and minute readings were furnished by Seth, KC3YE, and George, NS3O, gave his report on the Chapter Newsletter. A round of thanks and applause to these gents for their excellent work.



L to R: Seth, KC3YE; Bill, W3NHQ and Nate, W3SVJ. Photo courtesy K3VSL

Art, W3WM, gave a report on the International Convention in Ottawa and reminded us that this is the 50th anniversary of the founding of the Quarter Century Wireless Association. It should also be noted that Chapter 6 of Pittsburgh was founded 40 years ago on January 8, 1957. Were any of the readers involved in or does anybody know any of the history of the beginnings of Chapter 6?

Jack introduced Bill Lawrence, W3NHQ, our program chairman. Bill in turn presented Seth Ward, KC3YE. Seth gave an interesting talk on establishing a value for antique radio equipment. Seth suggested that this type of equipment probably is not a good investment for a profit motive. However, if it holds some pleasant memories or has a nostalgic feeling to it and you really like it, buy it and enjoy. Bill then asked Nate, W3SVJ, to discuss line voltage safety in the shack and home. A description of GFCI, ground fault circuit interrupters, was then followed by a brief question and answer session.

Jack proposed setting the spring meeting date. April 6th is scheduled for the chapter's first meeting of 1997. An open invitation to members and interested parties in QCWA is extended. The Sunday lunch and meeting will again be held at "Otto's Haufbrau House", on Rt19 South, in the Dormont area. Contact KC3YE, NS30 or W3SVJ for particulars.

Nate, W3SVJ, Secretary

Chapter 9, Southwest Ohio

Southwest Ohio Chapter of the Quarter Century Wireless Association will hold its 1997 Annual Banquet in conjunction with the Dayton Hamvention on Friday, May 16 at Alex's Continental Restaurant. C.O.D. bar at 7:00, banquet at 7:30. Charles Stinger, W8GFA, former manager of Voice of America Radio Station at Bethany Ohio will give us an inside look at this powerful transmitting station. Reservation deadline May 14. QCWA membership is not a requirement for attendance. For tickets (\$15.00 each) make check payable to Robert L Dingle, Treas. Chapter 9 and mail to 1117 Big Hill Rd., Kettering, OH 45429-1201.

The Hamvention committee is not mailing a second pre-Hamvention brochure this year. So whatever publicity you can give about our dinner would be appreciated.

Robert L. Dingle, KA4LAU, Secretary/Treasurer

Chapter 10, Michigan

Because the report of the annual meeting was missed when the Fall 1996 Journal was printed, I will bring you up to date on that meeting. The annual meeting was held May 4, 1996 at the Waterfront Restaurant in Cadillac, Michigan, with thirty-five members and guests present. QCWA Century Certificates were presented to Thomas Fifer, K8BKF; Edward Prested, W8IAC; Marion Stoner, W8VWY and Paul Spooner, W8YMI. Not present, but receiving the Certificates by mail were Paul Nutson, W8AUT and Helen Schmock, W8GJX.

Silent Key members W8CJT, "Ducky" Duckwitz and W8LUC, Ralph Burch were remembered by a moment of silence.

The chapter has also lost WA8BYA, Bill Boyd and W8YMI, Paul Spooner, since that last meeting.

The election of officers for 1996-97 presented Rich Johnson, K8HBG - now AD8U - as President; Joe Boyles, N8UTR - now W4GHR - as Vice President; and Beverley Stoner, K8ZJU as Secretary/Treas. Dale Cryderman, KA9EIZ, was appointed Chapter Chaplain.

The annual meeting for 1997 will again be held at the Waterfront in Cadillac at 1 PM on May 3. We are looking forward to another time of great food and fellowship. Tickets will be available at the Cadillac Swap-Shop or at the restaurant. We hope to see many of you there.

Check-ins on the Chapter net at 8 AM Eastern time on 3.903 MHz, Sunday mornings, continue to be very good despite the poor band conditions. Members who are in the warm climes for the winter many times can check in with the early-birds who come to the frequency at 6:30 or 7 AM.

We thank our early-birds for their efforts in being there to pick up these stations while band conditions favor them. We welcome all check-ins, members or not, and encourage anyone to look for our net and to check in.

Beverley Stoner, K8ZJU, Secretary

Chapter 14, San Diego

At our Winter brunch meeting January 12,1997 thirty-eight were in attendance including two visitors and their spouses. Our speaker, a volunteer at the Mission Trails Regional Park, talked to us about this relatively recent addition to the San Diego Park System. It is the largest urban park in the country and attracts people of all ages with a fine interpretive program, visitors center and trails suitable for hikers and bikers.

Congratulations to Raymond Dobler, W6BHF and Wayne Prather, W6GWY, who are receiving 75 year awards from QCWA this year. Neither of them will be able to attend a Chapter meeting for the award presentation. In chatting with Wayne Prather recently, he related a few of his experiences. He was first introduced to Amateur Radio at age 12 by an older brother who was a radio operator in the military during WWI and taught Wayne the code. Wayne, W6GWY, was first licenced in 1922. He joined the Navy ROTC while attending college in 1926-27 and subsequently went on active duty. He served from 1936 to 1964, retiring as a full Commander. During WWII as a communications officer, he was responsible for establishing shore stations on islands as they were freed from the Japanese. Wayne, W6GWY, was one of the founders of Chapter 14 and he was our first Secretary. He continues to be active mornings on 40 Meter phone. Again, congratulations on your 75th Wayne!

Several Chapter 14 members are active with the local ARES organization. Recently ARES has made itself available to the Alzheimer's Association to assist in their "Safe Return" program.

Congratulations to Tony Long, KC6QHP of San Diego who has been awarded a QCWA scholarship and will be attending UCSD La Jolla, next year studying Electrical Engineering.

Visit our Chapter 14 local net which is on Wednesday evenings at 2000L on 145.52 FM Simplex. John, K6QM holds forth as net control. Visitors always welcome.

Earl Burdette, W6YYV is recovering at Scripp's Memorial Convalescent Hospital, La Jolla.

The Chapter 14 Spring brunch meeting will be on Sunday April 20. Our guest speaker will be Fried Heyn, ARRL Southwestern Division Director. Details of this meeting will be included in a newsletter sent out prior to the meeting.

Reuben Onstad, N6BAS, Secretary

Chapter 16, Barry Goldwater

Sixty-one members and guests attended the January 25th luncheon meeting at Faylene's restaurant in Surprise, Az. Bob Menefee, AA7QJ and his banjo band entertained until lunch was served. I think everyone thoroughly enjoyed their playing and singing and hopefully we'll hear them again next year. Bill Jackson, W6HDP gave the invocation after observing a minute of silence in memory of departed members. Lunch was served at 11:45.

Our President, Ralph Barr, WØDNO opened the meeting at 1;00 PM with the first order of business being the awarding of service certificates. Lee Faber, W7EH received his 80 year award, only the seventh one issued in the history of QCWA. Lee is also the last remaining charter member of our chapter which was chartered in 1962. Other awards included: Cliff Bruce, W7ER, 65 years; Bill Kafka, W2YAV, 60 years and Bob



Left to right: Harry Snyder, W7HC, VP; Gerry Higgins, W7ES, Sec./Treas.; Lee Faber, W7EH, 80 yr.award; Cliff Brice, W7ER, 65 yr. award; Bob Cossman, W7MBB, 50 yr. award; Ralph Barr, WØDNO, Chapter 16 Pres.

Cossman, W7MBB, 50 years. There are several other people to receive awards who were not present. We'll list them elsewhere in the newsletter. We congratulate all of you for your dedication to Amateur Radio.

In new business, members voted to donate \$100.00 to the Tony Morice Memorial Fund. Tony, AB7LR was a member of Chapter 16 and became a Silent Key January 9, 1997. The Memorial Fund will help fulfill Tony's desire to improve the library at Cactus Shadows High School where Tony taught for over 30 years. It is my understanding that the library will be named after Tony.

After leading individual introductions around the room, Harry Snyder, W7HC our vice-president, introduced Jeff Mullins who gave a very interesting slide presentation and talk on Nikola Tesla. Tesla was probably best known for inventing the AC induction motor and the Tesla coil. Jeff gave a very dramatic demonstration with a Tesla coil that he had constructed. Jeff is part of a group of 300-400 people from all over the country who build and demonstrate Tesla coils.

Prize tickets were drawn and QCWA hats were given to the three lucky men winners and three lucky ladies received \$5.00 in cash.

After announcing that the next meeting will be at the Pine Cone Inn in Prescott on May 3, 1997 President Ralph Barr, WØDNO adjourned the meeting at 1:30 PM.

Gerry Higgins, W7ES, Sec/Treas.

Chapter 17, Allentown, Bethlehem, Easton

Meeting convened at 10.40 AM, after a fine breakfast, with President Bill (W3FYK) presiding. Bill called for a motion to accept minutes of our last meeting as published in the Newsletter. Motion made by Al (W3IKQ), Seconded by Mike (N3NWM), carried.

Frank, W3BRU reported that noted radio personality Gene Sheppard, K2ORS will be appearing on the Philadelphia talk radio show, WWDB, in the near future.

Ray, W3TDF read a note that was received with dues from our oldest Chapter member, Karl, W3CAU who is 94. He is looking forward to receiving his 75-year pin in the near future. Congratulations Karl.

Bill, K3ANS motioned to check into QCWA QSL's for our newly acquired call of W3GS. Second by Frank, W3BRU. Carried.

John, formerly W2WZG, informs us of his new call being W2JF. Congrats.

Treasurers report: Opening balance \$148.62: Income (dues) \$60; Paid out \$6, free breakfast to Ken, NK3Y; closing balance \$202.62. Motion to accept by Ken, NK3Y. Seconded by Bud, W3GOS. Carried.

According to the sign-in sheet there were 16 present. Hunting and contesting apparently kept a few of the regulars away.

There being no further business, the meeting was adjourned at 10:53 AM.

Following the meeting, we listened to Mike, K3NWM tell some of his fascinating adventures that he gets involved in with his avocation in the TV and book industry.

Dues were collected from 8 members. There are still 20 not yet paid. If you are one of them, the cover page will have the notification IN RED.

Next Meeting - Saturday, January 18,1997, 9:30 AM still at the Brass Rail Restaurant, Allentown, PA.

Ray Bilger, W3TDF, Sec/Treas



Back row, left to right: Dick Corbin, W8IYC; Dick Davies, K8IVP, vice-pres; Paul Chapin, W8KII and Jay Edel, WN8HHJ, pres. Front row, left to right: John Edel, K8LBZ, QCWA national director; Dick Wickiser, W8QL; George Flinchbaugh, WA8HDX and John Stultz, AA8IS.

Chapter 18, Findlay

The Findlay area QCWA Chapter has just completed its first year as a reactivated QCWA Chapter.

Jay (John) E. Edel, WN8HHJ is president; Dick Davies, K8IVP is vice president and Bill Kelsey, N8ET is secretary/treasurer. The Chapter is working on its local constitution and will vote on its acceptance at its April meeting. The Findlay area chapter meets the third Saturday of January, April, July and October at the Woodland Restaurant, 317 South Main Street, Findlay, OH at 7:30 a.m. Please contact Jay Edel, WN8HHJ at wn8hhj@juno.com or Bill Kelsey at kanga@mail.bright.net for additional information.

On February 1, the Findlay chapter traveled to Toledo to be a part of Northwest Ohio Chapter's (#142) breakfast. Those making the trip were George Flinchbaugh, N8ET; Loren Williams (W8KIL) and Betty Williams (XYL of W8KIL), Dick Davies, K8IVP and Jay Edel, WN8HHJ. Northwest Ohio Chapter provided plenty of hospitality and fellowship during the visit. They also offered to provide any assistance to the Findlay Chapter as was necessary during these "formative" months. Members of the Northwest Ohio chapter will attend the Findlay's Chapter meeting on April 19.

The Findlay chapter is also planning an outing to the Dayton Hamvention in May and involvement in Field Day in cooperation with the Findlay Radio Club, W8FT.

Jay Edel, WN8HHJ

Chapter 21, Canton

The Annual Meeting of Canton Chapter 21 was held at Kurt Inn on Saturday November 19, at noon with 37 members and guests in attendance (19 members and 18 guests). This was encouraging as we were forced to cancel our August meeting since we did not get enough reservations to meet the number required for the reservation. Like all Chapters, attendance has become a growing concern.

Past Presidents in attendance were recognized. They were: Charlie Scott, K8BYC; John Edel K8LBZ; Perry Ballinger, W8AU; Roy Burckhart, W8CZA; Nelson Caley, W8EAR; and



Changing the Guard ... Canton Chapter 21. L to R: Outgoing Pres. Joe Vignos, W1FEZ; Pres. Ed Clinger, WA8DRT; Vice Pres. John Linton Jr., W8DKI; Sec/Treas Dave Glass, W8UKQ; (kneeling) Retiring Director Larry Schmader, K8RMY; Directors Phil Gizzi, W8IIV and Nelson Caley, W8EAR.

Mel Vye, W8MV. Retiring Officers, President Joe Vignos, W1FEZ and Director Larry Schmader, K8RMY were recognized for their services.

Kurt's delicious buffet topped off by his "Flaming Baked Alaska" desert was enjoyed by all. Door prizes provided by Pat Vignos were won by Dorothy Gammeter, Vivian Gizzi and Anne Ballinger. Roy Burckhart, W8CZA won the member prize of a free meal.

Results of the election which was held before eating were reported. Our new officers elected for two year terms are: President Ed Clinger, WA8DRT; Vice Pres John Linton, Jr, W8DKI; Sec/Treas Dave Glass, W8UKQ; Director Phil Gizzi, W8IIV. Director Nelson Caley, W8EAR has one remaining year in office.

QCWA Director, John Edel, K8LBZ brought us up to date on what is happening at QCWA headquarters. New directories and unfounded concerns about losing Amateur frequencies were covered. He also announced that the 1997 Convention will be in Palm Springs, CA and the 1998 in Kansas City, MO.

The President's Gavel was presented to incoming President Ed Clinger by retiring President Joe Vignos. Pictures of incoming and retiring officers were taken for our archives.

Past President Mel Vye, W8MV, professor at Akron University, presented an outstanding program on his recent trip to China to work with a Chinese Professor in setting up a complete Amateur Radio Station BY2QLY in Liaoyang, China. After much frustration and red tape the station went on the air and Mel told of the thrill of being on the other end of a DX pile-up. A very interesting slide presentation of life in China accompanied his presentation.

Next Meeting will be held Feb. 15 at the Home Town Buffet at noon.

Joe Vignos, W1FEZ

Chapter 28, Western New York

Central New York Chapter 28 held its annual fall luncheon and meeting on Friday, October 11th at the Rusty Nail restaurant in Cortland, NY. Twenty-four members and guests met at noon for pleasant fellowship and a good lunch. Following the lunch a business meeting was called to



QCWA Chpt 28 at the Rusty Nail, Oct. 11, 1996. Photo courtesy Bob Groh, W2IFA

order by president Bill, K2MFB. The business of the day was election of officers. The following officers were re-elected and installed for the ensuing year: President, K3MFB, Bill; Vice President, W3HOR, Sam; Secretary/Treas, K2AOV, Merle.

Door prizes were awarded and the meeting adjourned at 2:30 pm.

Merle Rigby, K2AOV, Secretary/Treasurer

Chapter 29, Finger Lakes

he largest luncheon attendance for Chapter 29 in re-L cent history occurred today, January 31st. We were also honored by the presence of ARRL Western New York Section Manager Bill Thompson, W2MTA and his wife Betty, who traveled up to Syracuse from Newark Valley, near Binghamton, to be with us. New chapter president Jim Mozley, W2BCH conducted a business meeting during which we discussed introduction of raffles, door prizes, and guest speakers at our monthly luncheons. He also suggested an annual Saturday breakfast or brunch so we could accommodate members and others eligible to be QCWA-ers. They have jobs and find it difficult to both pay into our Social Security and attend a weekday lunch! More on this as arrangements need to be made. We would like to invite a QCWA member of national renown to be our guest speaker at each yearly affair. This Saturday event would be in addition to our last-Friday-of-the-month lunches and meetings at Weber's in Syracuse, NY.

I would urge you to take a close and thoughtful look at the March issue of "QST". In it you will find the WRC99 Planning Committee's tentative proposal to restructure the present system of licensing and HF band allocations. Chief among the controversial issues is elimination of the Novice bands and Novice license, allowing a merged Novice-Tech Plus licensee significant privileges in several HF bands that are now available only to General Class and above, and a return to a Morse sending test and one-minute-solid-copy receiving test at each level, the speed for General Class to be reduced to what the Committee seems to think is a learning barrier at 10wpm instead of 13wpm. You will have until the end of May to com-



Joe, W2FUU (left) presents Meritorious Award to Jim, WB2BCH.

ment to your ARRL Division Director on what they propose. I urge you to take each measure proposed and comment on it in detail. This is only a proposal, but rest assured the ARRL will convert it to a request for rulemaking with the FCC at some point after they digest our inputs and hold a Board Meeting (i.e. possibly as early as July depending on how complex and voluminous the responses turn out to be). I have seen the official text of the proposal weeks before QST publication and can tell you that this could easily attract more HF licensees at the cost of dumbing down the testing as well as handing Tech Plus licensees privileges only available to those with at least a General Class license at the present time. If the end result is not to your liking, you will have yourselves to blame by maintaining a "let George do it" attitude. This is Our avocation. For those who are members, this is Our ARRL. Don't let the Committee dumb down the Amateur Service in its attempt to solve the waning number of ham newcomers, the lack of interest in HF, and the lack of membership in the ARRL. It is crunch time. It is time to pay attention and to make constructive comment. When you read this, you will have less than two months to write your ARRL Director. If you want my personal comments, write me or contact me via ny2v@juno.com.

I will send you the ideas I have, point by point, if you feel it will help you consider the ARRL proposal.

At our December luncheon, incoming Chapter president Jim Mozley, W2BCH was presented, by outgoing president Joe Molinaro, W2FUU, a Meritorious Award in recognition of his many career technical achievements and his longtime service to the hobby as a volunteer examiner and mentor. Jim has attracted more Central New Yorkers to ham radio than any other person. He even bought us our Chapter banner. He has held numerous offices in local clubs and in the ARRL (Atlantic Division Vice Director), and has been a major contributor to public service in Onondaga County. It is an honor and a privilege to serve with Jim as a Chapter 29 officer. We both plan to assist at the Rochester, NY Atlantic Division Convention's QCWA booth over the Memorial Day Weekend, so please stop by as so many did last year. We will be located right next to the ARRL booth, right across the aisle from the hamfest's raised-floor administration area in the Dome Arena.

Chapter 37, Harrisburg

hapter 37 held its December 14, 1996 meeting at Shoney's Restaurant in Carlisle, PA. Eleven members were present. The meeting place was changed due to the unavailability of a meeting room at Bonanza.

Chapter 37 Treasurer George Kabroth, W3PLI, was reported

to be scheduled for heart surgery.

George Kasdorf Sr, W9FSA, was presented with his QCWA Century award. Unfortunately, we didn't have a working camera to capture the event.

An election of officers for 1997 was held. The officers are: President, Marshall Stenger, W3KRM; Vice President, Irv Sanders, K3IUY; Treasurer, George Kabroth, W3PLI; Secretary, Dave Barrows, W8IJ

The group will be meeting at Shoney's during 1997.

Dave Barrows, W81J, Secretary

Chapter 41, Dallas

allas Chapter 41 concluded its 1996 social season with Dits annual formal New Year's Eve Dinner Dance held at the exclusive Bentley Woods Country Club. Scholars in the history and folklore of the Dallas chapter will recall that prior to the spin-off of the Fort Worth membership group into a separate chapter this annual event was then the informal New Year's Eve Diner Dime-A-Dance at Duxton's Economy Diner & Dance Hall ("See our listing under 'DEDD' in the Yellow Pages") where barbecued chicken eaten with abandon was unfailingly the New Year's Eve Blue Plate Special. (Founding Dallas Chapter members when pressed reluctantly allow that at one time its membership was essentially more "Blue Plate" than "Blue Chip.")

The chapter yacht, QRMary, (the former "Britannia") is enroute to Rotterdam for drydocking while the chapter's private railroad car "HeavyGreen" (the former AT&SF observation-sleeper "Desert Flower") is in the Amtrak shops at Belle Grove, IL undergoing AAR "spec-mods" and should return to service in time for a trip

to the Super Bowl in New Orleans.

Under consideration at a recent chapter board of directors meeting in the Poconos but not yet ready for disclosure was the Audit Committee's "Annual Fiscal Assessment & Recommenda-

tion Report (AFARR)".

Preliminary board response included a "trial balloon" suggesting the early dispatching of a delegation to National Headquarters in Eugene, Oregon to present the proposal of a national membership dues assessment to cover the Dallas Chapter's unexpected budgetary overrun for fiscal 1996 and its projected overrun for fiscal 1997. Seen from AFARR, board members are confident that the national membership at large will be amendable, if not eager, to participating in a monetary manner in the pacesetting activities of "America's Chapter."

Bob Olney, N5NT, President

Chapter 45, Citrus

t is with regret that we list another member of Chapter 45 as a Silent Key. Warren Hanna, KR4NA, passed on December 18, 1996. Warren had been in the hospital for several weeks and seemed to be improving to the point that he was expected to come home. But, he took a sudden turn for the worse.

This past year Citrus Chapter has had four members become silent keys; while we have added two new members. The emphasis this year is going to be the recruitment of new members.

The Annual meeting of the Chapter is in December. Al LaPeter,

W2IL was re-elected President for the coming two years and Mort Cohen, WA2ARS was re-elected Treasurer.

Many members of the Chapter will participate in the QCWA 50th Anniversary QSO parties. The different format has generated much discussion. It is hoped that non-QCWA hams can be briefed on what QCWA is, and what it stands for. The non-contest format allows us to chat with contacts and spread the good word about QCWA.

During the past year we installed a new repeater. The old one had seen many years of service and had to be worked on frequently. It is now set up as a backup for the new unit. Only a switch of the input and output cables is necessary to put it into operation. We have had a continuing discussion with the manufacturers of the control board. The CW identifier was not what any good CW man would want to have identifying the repeater. Engineers at the factory, apparently not CW men, said they had set the identifier up by the book, proper spacing and length of dots and dashes, etc. We hope to iron this out with them at the Miami and the Orlando Hamfests in February.

Two members of the Chapter have new call signs, Al LaPeter, was WB4DRF, now W2IL, and Vern Jensen was KO4ZY, now W8GGU. The Chapter has applied for the call W4PLA to be the Club Call Sign. This was the call of Don Fisher, now a Silent Key, who was very active in the Chapter. The Chapter feels it would be a fitting tribute, in light of his many contributions to the Chap-

Citrus Chapter meets 12 months of the year on the third Saturday of the month. The meeting is 12 noon, at Stacey's Buffet in the K-Mart Plaza Mall, Altamonte Springs, junction of State Routes 436 and 434 about a mile west of the junction of I-4 and SR436. We welcome any hams in the area to come and join us. The food is good, the prices reasonable and the fellowship is out of this world.

We have an open net on Tuesday evenings at 1930 hours local time. This is on 147.195 mhz. All hams are welcome to join. Paul A. Turner, W1DLP, Secretary

Chapter 46, Founders; Chapter 81, Long Island; Chapter 181, Hudson Valley

embers and guests of the above, and a couple of other M chapters in the area met for their annual joint meeting on December 7, 1996. The meeting was hosted by Chapter 181 at the Amalfie Restaurant in Briarcliff Manor, NY. The meeting was chaired by Harry Moore, W2JQS, who is President of the informal inter-chapter association, Conex (Council of Northeastern

Chapters, QCWA).

A very entertaining meeting featured guest speaker Dr. Lee Davenport, who presented a fascinating story about the crash development during World War II of one of the first 10 cm gun laying radar systems - the SCR 584. This was one of the first projects undertaken at MIT's Radiation Laboratory, known to many as "Rad Lab", a civilian scientific organization established well before Pearl Harbor by the National Defense Research Council (NDRC). The Council later came under the U.S. Office of Scientific Research and Development, (OSRD). After just a few months of work based on the British magnetron and in very preliminary breadboard form, what became the SCR 584 was taken to an Army test site where its value in automatically tracking aircraft was convincingly proven. In some of the old photos shown as slides, Dr. Lee pointed out a tall, thin, very young man in the midst of the equipment and people - himself! He was a charter member of this project team. The success of this radar in its vari-



At the December 7 joint chapters meeting, hosted by Chapter 181, Harry Moore, W2JQS, presents to Richard O'Brien, NJ2J, the QCWA Distinguished Service Award originally announced at the QCWA 1996 Convention in Ottawa. Photo courtesy W2AUF

ous models became very well known during the war. Incidently, Dr. Lee highly recommended the recently published book, "The Invention That Changed The World" by Robert Buderi. It is one of the Sloan Technology Series. He was interviewed by the author, is quoted several times and is shown in one of its pictures.

A Certificate of Appreciation was given to Dr. Davenport for his well appreciated talk. A special Certificate was presented to Justin Stenerson, KF2AC, for his long time service as net control on the 2 meter net which has served Chapter 181 and the Conex group for many years. Justin has stepped down from this task and it is now handled by Brother George, WA2RRK.

The QCWA Distinguished Service Award, which had been announced at the recent Ottawa QCWA Convention was presented by Harry Moore to Richard O'Brien, NJ2J. O'Brien, incidently, was at the Harvard Radio Research Lab and had frequent access to Rad Lab during WWII. He and Dr. Lee had not met then but had a good time recalling their war-time experiences in Cambridge Mass.

Harry Moore, as VP of OOTC (Old Old Timers Club) announced creation of a scholarship fund to honor W2JE, Lt Col. Augustine J. Gironda, USAF (Ret). Gus served as Secretary/Manager of OOTC for 10 years and in the same capacity for QCWA for a similar period. Francis Gironda, widow of "Uncle Gus", was a guest at the luncheon and graciously acknowledged establishment of the fund. Contributions can be sent to Lee Nirko, W9MOL, Treasurer of OOTC, or to Harry Moore, W2JQS.

Officers for Conex for the next year were elected, essentially the same as for the past year. Following a prize drawing, the meeting was adjourned.

Dick O'Brien, NJ2J, Secretary, Chapter 181

Chapter 49, Atlanta

Our Annual Christmas Meeting was held at North Druid Hills Morrison's Restaurant with 17 in attendance. Attendance was down due to several members having other Christmas plans and commitments.

The annual Christmas meeting is quite popular because it's a very joyful and social meeting in which members ex-



L to R: Frankie Womack, W4BJY, VP, presenting awards to Bob Brady, WA4FTM, Meritorious Award & 55th Gold Certificate; George Sensibar, W9RR, 50th Gold Certificate; and Bill Doughty, W9UIX, his 60th Gold Certificate.

change gifts but also a special meeting to formally present special QCWA awards. After a good social lunch no new or old business was brought to the floor. Next on the agenda was the presentation of QCWA Certificates. Presented were: George Sensibar, W9RR received his 50th Golden Certificate; Bob Brady, WA4FTM received his 55th Golden Certificate; Bill Doughty, W9UIX received his 60th Golden Certificate. Some awards will be mailed to some who were not in attendance.

In addition Bob, WA4FTM, was surprised when he received the QCWA Meritorious Award for his excellent chapter work and support during the previous several years and especially as the present club Secretary/Treasurer.

After the awards the "Elves", Joan Cushing and Mary Brady, distributed the gifts which, as always, was a lot of fun. Some gifts included good working antique radio equipment, too!

The meeting was adjourned about 2:15 PM after which we had a lot of reminiscing and good fellowship.

Bob Brady, WA4FTM, Secy/Treas

Chapter 51, Tex-La Golden Triangle

This quarter's monthly meetings were all held at Dorothy's Front Porch Restaurant with approximately 30 members and guests attending. At the November 2nd meeting a representative of the Better Business Bureau talked about fraudulent tele-marketing scams targeting senior citizens. A local television station filmed interviews with our members that aired the following week as part of a public service campaign warning senior citizens about tele-marketing scams.

At the December 7th meeting president Dee Evans, WA5BEU, recognized members who served in the armed forces and merchant marines during WWII, especially Tom Housenfluck, W5HYD, whose submarine was at the dock with its soft-patch open when the Japanese attacked Pearl Harbor 55 years ago.

We inducted our officers for 1997: President: Norman Helms - K5SAC Vice-President: Dukes Graham - K5JFM Secretary/Treasurer: Dee Evans - WA5JFM

The program was presented by A. C. Randle IV, N5DLS, trustee of the Jefferson County Amateur Radio Club's repeater, W5SSV. He brought us up to date on the use of its special



Chapter 51 officers for 1997.Left to right: Dukes Graham, K5JFM, Vice-President; Dee Evans, WA5BEU, Secretary/Treasurer and Norman Helms, K5SAC, President functions.

At the January 4th meeting Julie Kennedy, manager of the local Cellular Max, brought us up to date on cellular telephone service in our area.

Dub George, W5DUB, Bulletin Editor



Hortense Baker, the widow of former member Howard Baker, W5AS with a copy of the new club license.

Chapter 63, Central Oklahoma

Our first Chapter meeting of 1997 was held January 11, at Dodson's Cafeteria in Southwest Oklahoma City, with 30 members and guests attending.

Early in 1996 our Chapter received a club call of KC5QVX. With the opening of gate 2 vanity call sign program we applied for the call W5AS of a former member Howard Baker, who became a Silent Key in 1988. Howard was a long-time member and held the position of Secretary/Treasurer of the Chapter for several years. In order to acquire Howard's call, his widow Hortense Baker gave the Chapter permission to apply for his call. In early December we received the club call sign of W5AS. At our Chapter meeting a copy of the club license was presented to Hortense and an honorary membership in the Chapter was given to her. Henceforth, our Chapter on-the-air meetings will use the club call sign of W5AS.

At this meeting we also had an election for Secretary/Treasurer and two Directors. Norm Wilson, W5FLO, was elected as Secretary/Treasurer for another two year term. The two Directors elected were Harold Hall, KA5AGM, and Ronald (Ron) Tucker, K5IGB. Welcome aboard to the new Directors. I would like to thank Jim Speck, W5AI, and Sam Gover, WA5WHO, for all their service to the Chapter.

At the beginning of 1996 the Chapter had 73 members. At the end of 1996 our Chapter membership has grown to 97. We welcome all the new members and look forward to meeting each and every one of you personally or on one of our weekly on-the-air meetings.

Jay Ingram, W5QVS, President



Front Row: Director William Raue, K5KKO; President Jean Carlson, KØZRD; Director Ed Corliss, K5DIT. Back Row: Director Earl Wood, WA5YRP; Vice President John Dunsmore, W5DTP; Secretary/Treasurer Manny Gonzalez, W2BFI; Director Rick Rumbaugh, WA5PIE.

Chapter 64, El Paso

Members attending the November meeting of Chapter 64 were entertained by the interesting report of Tex (W5BQU) and Waunita Burdick on their recent trip to Hawaii. Tex is a very young 96 years old and lives an active and exciting life. We should all be so lucky!

The annual meeting of Chapter 64 was held on December 21, 1996. There were 14 members and 9 guests present. Results of our recent election were announced but installation was postponed until the January meeting because of the absence of many members due to illness. Newly elected directors are William Raue, K5KKO and Earl Wood, WA5YRP. John Dunsmore, W5DTP, was re-elected Vice President and Manny Gonzalez was re-elected Secretary/Treasurer. Fruit basket door prizes were won by Milly Wise, W5OVH and Earl Wood, WA5YRP.

We were very sorry to hear that Dean Bevan, K5HTR, Spring, TX, a long time member of Chapter 64, lost his wife, Bony, and his daughter, Linda, last October. Our sympathy goes out to you, Dean.

Our sympathy is also extended to the family of Walter Palmer, W5KWH, a charter member of Chapter 64, who became a Silent Key on January 6, 1997.

Our chapter was well represented at the annual awards banquet of Worked All El Paso, several having taken part in the contest last November. WAE certificates are given to hams

throughout the world for working 15 El Paso stations. The Ambassador award, which goes to the local ham whose call appears the most times on certificate requests, was presented to our member, Ed Corliss, K5DIT. We are proud to have such an active ham in our club. Jean Carlson, KØZRD, had high score for QCWA members and YLs.

We started the new year using the club's newly acquired vanity call, W5RO, which was the call of charter member, Howard Brokate, for calling the Saturday morning Round-up Net. This net meets weekly on 3933 kHz at 1530 UTC. Rick Rumbaugh, WA5PIE, the call custodian, was net control for the month of January and had the honor of using the call for the first time.

Jean Carlson, KØZRD, President



L to R: Directors Bob Jones, W2OZT; Lorraine Jones, K2ZVS Photo courtesy W2AET

Chapter 65, Niagara Frontier

Our Christmas Party at Flying Tigers Restaurant had 16 in attendance.

Our Chapter now has 46 members. Let's try for an increase in membership in 1997.

On 10 Dec 1996 our Chapter 65 was issued an "In Memorium" Club Station Call W2SD. This of course, was in memory of Ray Griswold, founder of Chapter 65 and President for many, many years. It is an honor to remember "Slim" with the use of his call. Thanks to his wife Doris, for allowing us to apply for W2SD. Club Station Trustee is K2FJ.

We are very sorry to report the passing of the following long-time members: Mel Howarth, VE3DEE of St. Catherines, age 76; Frank Buckley, W2MK of West Seneca; and Dr. Stuart Farmer, W2NW of Eggertsville, age 87.

Information: Rochester Hamfest May 30, 31, June 1. Check your renewal date on your amateur licence. Don't let it lapse! Ken Palmer, K2FJ/ZB2G, Secretary

Chapter 66, Spaceport

The Spaceport Chapter, in the area surrounding the Kennedy Space Center and the Cape Canaveral rocket launch facilities, has been active, involved and interested in QCWA and other amateur radio activities for more than twenty

years. Our meetings are held on the second Saturday of the month at Willards Restaurant in the Holiday Inn, Cocoa Beach, Florida, at 11:30 AM.

Officers for 1997 are Art Greene K4DQC, President; John Nauman W9CN, Vice President; Bonny Lathen WB9TUM, Secretary; and Bill Meussig K4FD, Treasurer.

We look forward to a year of interesting, pleasant and friendly exchanges concerning our lives and the State-of-the-Art in amateur radio communications and operations which have been the nature of our meetings for the last 23 years.

All interested parties are welcome.

Art Greene, K4DQC, President



Kate Saul, AE2Z; Herman Milatz, W2TLC; 50-Year Certificate presentation, 12/96 meeting

Chapter 81, Long Island

The December 1996 meeting was attended by 27 people and there was much good fellowship in the spirit of the season. Herman Milatz was presented with a 50 Year Certificate (see photo). At an earlier meeting, Jay, W2DX, also received a certificate.

The chapter is changing its meeting place in an effort to hold costs down and an officer should be contacted if you are looking to come aboard, as we may have moved.

Officers elected for 1997 were: President Charles Baker, W2KTF; Vice-president Herman Milatz, W2TLC; Treasurer Hugo Ianderer, W2IGH; Secretary Carroll Hamlet, W2QBR; Directors: Andy Cola, W2VZQ; Martin Miller, NN2C; Kate Saul, AE2Z; Sid Wolin, K2LJH.

The chapter has incorporated the QCWA logo as down-loaded from the web page into the chapter newsletter. It's amazing how communication facilities are changing since computer technology has proliferated. The chapter is collecting E-Mail addresses for its members and will publish them in the newsletter.

Kate, AE2Z, has been attending area hamfests to provide a QCWA table and has found at least three new members for QCWA. She and Herman, W2TLC have been appointed as a membership committee to continue this work and to tap new members from the area who are joining national.

Carroll Hamlet, W2QBR, Secretary

Chapter 91, Vic Clark

ur featured speaker at the January, 1977 meeting was QCWA President, and long-time Chapter 91 member, Jack Kelleher, W4ZC. He told of some of his experiences as a professional "brass pounder" during the ten year period from 1932 to 1942-during the heyday of CW.

What Jack had to say was so interesting that his story begs to be told in detail. This would take much space here, so we will present a short version of it now and give many more details in a separate article for a future issue of the Journal.

Jack got started in radio using a Ford spark coil to "communicate" with neighbors, then got serious about learning the code by copying commercial stations near the 40 meter band (most notably XDA in Mexico City and HPC in Panama City). Jack received his first Ham call, W2DSV, in 1932.

Jack enlisted in the US Army in 1932 and was trained as a CW radio operator at Fort Monmouth, NJ. After this training he was posted to Fort Sam Houston, TX. There, six to eight operators worked a CW net that included Washington HQs, several stations in the 8th Corps area, and two stations handling military air traffic progress reports. Messages were sent using a bug at up to 40 wpm.

In 1934, Jack received further training at the Army-wide radio school at Fort Monmouth. One of his tasks there was to transcribe inked paper tapes that contained intercepts of messages transmitted by the Japanese. These were in the Japanese version of the Morse code, also known as Kata Kana.

Jack returned to Ft. Sam Houston in 1935. Message handling had become more automated by then: a Kleinschmidt machine punched paper tapes which were then read by a Boehme keyer. This automation raised the transmission speed to around 50-55 wpm.

However, the copying was still done by ear. Telegraphers' typewriters (Underwood Model 5 "mills" (all caps)) were used for transcription.

The War Department net was a de facto training ground for commercial operators in such organizations as RCA Communications (RCAC), Mackay Radio, and other commercial concerns. The salaries provided by these civilian employers was much better than those provided by Uncle Sam, so Jack left the Army and joined RCA as an international radio opera-

At RCA, 20 or more operators handled traffic to all continents except the Far East; there also were a dozen circuits to major stock-market exchanges worldwide. The operating room in downtown New York City had VHF links with transmitters at Rocky Point and receivers at Riverhead (both on Long Island).

Jack said that when conditions were good, it was not uncommon to receive traffic manually at 60wpm. Also, the number of errors permitted an operator during a one-month period of eight-hour shifts was one; yes, one error per month at

Jack said that if was reported that an operator made more than one error per month, he was invited to have a little chat with his supervisor.

Circa 1939, RCAC established domestic circuits between major cities in the U.S. These circuits each had four multiplexed channels on one radio frequency. Transmissions utilized a seven-bit digital code; keying and copying were fully automated. When the receiving decoder detected a parity error, a Maltese cross symbol was printed. The attending operator then would manually request a retransmission. This automation was "the beginning of the end" for manual CW operators.

Jack left RCAC and returned to the Signal Corps labs in 1940. There he was involved in the development of VHF FM equipment for military vehicles.

In 1941, Jack was assigned to a White House detail involved in modernizing President Roosevelt's protective communications.

In 1942, President Roosevelt made a tour of defense plants by rail. Jack helped equip a B&O Railroad baggage/passenger car with HF and VHF radios and antennas for this tour. lack was the CW operator on this tour, and reminisced that the receivers used on the train were a Hammarlund Super Pro and a BC-342.

Jack's "warm-up act" was John Willmuth, (NQ4Q), who gave a brief presentation about QRP. John showed his first QRP rig, a handsome homebrew transmitter constructed in a pipe tobacco can. John's next station was a Heathkit HW-8. Its first contact? A station in Finland!

Auction -- Vice President Al Wheeler (WB4JJJ) conducted the not-to-be-missed auction and related events. These brought in \$63.00 for the chapter!! Many thanks to Nelson Seese (W4BHD) and Dick Rucker (KM4ML) for donating auction

This meeting was attended by 31 members and guests, including three members of Chapter 23: Stan Brigham (W3TFA), Brian Greene (W3CQE), and Walt Rader, (WA3DUF). We opened with each member and guest giving a self-introduction and telling a bit about one of their hobbies other than Ham radio. Some very interesting talents were discovered!

Chapter Reports -- Secretary Dick Rucker's (KM4ML) minutes of the previous business meeting were approved. Dick announced that member Bill McAninch (W4IIA) had become a Silent Key in January 1996. Treasurer Al Cammarata (W3AWU) distributed copies of the Vic Clark Chapter formal 1997 budget.

President Frank Haynes (W4NUA) noted our chapter will be active at the Vienna, VA, "Winterfest" (TM) in February.

November, 1996, Meeting -- Another outstanding presentation to Chapter 91! "Bix" Bixby's discussion of KDKA's antenna "trials and tribulations" engendered much interaction among those present to hear it. So as not to be missed by those who don't read ALL the Chapter Reports (WHAT?! You don't?!), an account of Bix's exposition will appear in a future issue of the Journal.

Unfortunately, outgoing President Tony Stalls (K4KYO) was unable to attend this meeting. Vice President Frank Haynes (W4NUA) filled in and welcomed 34 chapter members and

Bix (WA3WQF) will begin putting QCWA-related items on his WA3WOF-1 packet BBS, 145.03MHz.

Election of Officers -- The Chapter 91 officers for 1997 are

President: Frank Haynes (W4NUA) Vice President: Al Wheeler (WB4JJJ)

Recording Secretary: Dick Rucker (KM4ML)

Treasurer: Al Cammarata (W3AWU)

Corresponding Secretary: Jim Wilcox (W3WV)

We look forward to having them serve the chapter.

Jim Wilcox, W3WV

Chapter 92, Northern Lights

hapter 92 held its annual banquet and meeting on 9 November, 1996 at the Golden Lion Hotel in Anchorage, Alaska. One of the highlights of the meeting was accepting donations to purchase turkeys for needy families for Christmas. Over \$300.00 was collected and with the help of the Veterans Resource Center, enough turkeys, with all the trimmings were purchased, to feed 10 needy families. This project was started a couple of years ago and has become a big success with the Chapter and the Veterans Resource Center who locates the families.

The election for new officers was held with the following results: Jim Wiley, KL7CC, president, Rob Wilson, AL7KK, vice-president and Jim Tvrdy, KL7CDG, sec/treas. The new officers took over the helm and the meeting was adjourned.

Unfortunately, we all forgot to bring a camera, therefore no pictures were taken of the settings and the new officers. **Jim Tvrdy, KL7CDG, sec/treas.**



L to R: Ace Norton, NA4I and Andy Anderson, K4PSW look over the Christmas presents brought for distrubution to the needy in our area.

Chapter 100, East Georgia

Chapter 100 is alive and well. At our October meeting a decision was made to give Christmas presents for the needy at Christmas.

At our December 12 meeting all arrived bearing wrapped gifts marked boy or girl and age. They were delivered December 13.

It has been 20 years since Chapter 100 was chartered. Although dormant for a few years we are now growing. From 12 to 22 members in a few years. We are currently reviewing the history of the Chapter to identify original members. If you were here in '76 and a member please let us know.

We are looking forward to a better year and new members. **Andy Anderson, K4PSW**

Chapter 105, Middle Tennessee

1 996 was a good year, had a gain in membership of four. This is not a great number but is good for a young chapter as we are. The average attendance at our quarterly meetings were 15 members, 3 visitors, giving a total of 18. The chapter obtained its call sign, KF4KWD. It is to be used in chapter sponsored activities such as contests, public service, etc.

According to QCWA headquarters' records, there are several QCWA members in the Middle Tennessee area who are not affiliated with any chapter. You are cordially invited to meet with us at our regular meetings whether you are a member or not. You certainly are missing a great opportunity to meet and fellowship with some of the fine radio amateurs, discuss old rigs, DX, rag chewing, as well as the new modes that are now available.

The regular meetings are the first Saturday of February, May, August and November, unless a conflict causes the date to be changed. We meet at Ryan's Steakhouse in Hermitage, TN; those who like to eat be there at 11:00 A.M.; those who do not care to eat be there at 12:00 N for the start of the meeting. If you would like to be placed on the chapter's mailing list and/or more information is needed, contact O. D. Keaton, WA4GLS, Secretary. We need the support of every eligible radio amateur in this area to be a completely successful chapter. O.D. Keaton, WA4GLS, Secretary



Chairman Albert Leinemann, DL9AR and Vice-chairman Fritz Kirchner, DJ2NL at the booth of QCWA and OOTC on HAMRADIO 96 in Friedrichshafen, Germany

Chapter 106, German

In 1996 we had our yearly meeting on May 10, in Berlin. 25 members, and as special guests Ruth, K5OPT and Gene, W5EJT, from San Antonio Chapter, were present. After a very good lunch in the 'Seehotel am Mueggelsee' the QCWA-Members gathered in the conference room to hold the meeting, while the accompanying 'better halves' remained in the restaurant to hold their yearly 'talk together'.

Chairman Albert Leinemann, DL9AR gave his report for the last year. The events of the year were mentioned and also what will happen in the coming period. Silent keys Hansgeorg Baehr, DJ2UU and Otto Sailer, DL8AJ were thought of. The next annual meeting will be held from May 16 to May 18, 1997 in Wuerzburg. Guests are welcome.

QCWA Chapter 106 and OOTC were again present at the big European hamfair 'HAMRADIO 96' in Friedrichshafen. Many OM's and XYL's from Germany and several foreign countries stopped at the booth and talked to the Chairman, Vice-chairman and Secretary. There was also a meeting of the chapter with 22 members in attendance. Chairman Albert Leinemann, DL9AR pointed especially to the coming election for the officers of the chapter.

Werner Lembcke, DL1ZC, Secretary

Chapter 108, Beaver State

The Beaver State Chapter 108 held its first quarterly meeting of 1997 at Chelsea's Restaurant in Salem, Oregon, on 18 January 97, with newly installed President Hazel Mae Keefer, KA7KMD presiding with 24 members and guests in attendance.

Following lunch with sufficient time for numerous "across the table eye-ball QSOs" the meeting was called to order. After introductions the minutes of our last meeting were approved as written. The treasurer then reported that the Chapter was indeed solvent with money in the bank.

Jim Walsh, W7LVN, one of our charter members, was called upon for comments of interest about headquarter's happenings. He indicated that nearly all of the official board members were now using e-mail to handle their official "Ham Business" and perhaps more of us would find this communication facet most efficient, effective and useful.

The office is now separating previously unreported "Silent Key Journal Addressees" from its current address list and has found it necessary to make numerous changes. He passed along information that QCWA President Jack Kelleher would be making several trips to Oregon this Spring; to attend the next Board meeting in April, which will be followed by a SOWP meeting in Portland of which he is also its National President, and then to the Seaside Convention for the QCWA luncheon in early June. For those liking to travel, the next National QCWA Convention will be in Kansas City this coming October. These were just a few of the items covered by his remarks.

It was announced that we will have a guest speaker at our next meeting who will demonstrate and discuss one of amateur radio's latest practical utilities, which is the APRS (Automatic Packet Reporting System). Do some research work, then come hear and see this demonstration.

It was agreed that the spring meeting should be in Albany at 1300 hours on 19 April at Mann's Buffet.

Fred Dickson, W7LDH, Secretary

Chapter 112, Yankee

The Yankee Chapter Christmas party was held on December 7th at Dewey's in Lakeville, MA. And though we had snow (again!) it held off until early evening so travel was not a problem. Nineteen members and guests attended.

After a fine meal, a gift swap was held.

Winners of the door prizes were Earle Drake, W1KBV, and Janet Walbridge, XYL of Chuck, K1IGD.

To help break up the winter season, a February 15th meeting is planned with a speaker. Remember that the chapter annual meeting will be held in April and the New England Chapters picnic on July 19th. Details will be in the upcoming Newsletter. Chuck Walbridge, K1IGD Sec./Treas.

Chapter 115, Chattanooga

The Chattanooga Chapter 115 QCWA held three meetings during the year.

At the official annual meeting on Feb. 16, an election was held, with the following officers elected: President, Charlie Curle, AD4F; Vice President, Charles Wheaton, KJ4RC; and Sec.-Treas., Joe Duncan, W4ECW. This was a social evening and there was no formal program other than elections, and there was a discussion of prospective new members.

At the June 10th meeting, an interesting video was presented by Jack Wright, KC4ZEK, entitled, "The Future of Telephone, TV, and Computers; The Merging of The Three."

At the October 15th meeting, a video was presented by Joe Duncan, W4ECW, entitled, "Empire of The Air," a history of the development of broadcasting, and the great rivalry between Edwin Armstrong and David Sarnoff.

There were considerable regrets and condolences expressed at the passing of two members, Dale Green, W7RDG, and Herb Beard, W4ZJV, now silent keys.

Chapter 120, QCWW

CWW Chapter 120 is starting the New Year with a membership drive. The member recruiting the most new members has a choice of a QCWW pin or a 3-year paid membership in QCWW. Even though the name of our chapter is Quarter Century Wireless Women, we do have some OMs as members and as President Helen Drake, K5ECP said, it will be interesting to see if a YL or OM wins this contest. In 1996 we acquired 3 new members and had I re-instated member, which brings us to 132 members.

Since our chapter is international, we have only one scheduled meeting per year, which is held at the time and location of the Annual QCWA Convention. The 1996 meeting was held on October 5 in Ottawa, Ontario, Canada with 14 members in attendance. At that time it was announced that Cathy Dunlap, W4OMH, would fill the vacancy on the board which was created by the death of Mary Ryden, K8ONV.

With regret, we report four Silent Keys in 1996. Their names and calls are: Bernice Hanrahan, W2UGY; Ralph Burch, W8LCU; Mary Ryden, K8ONV; and Philip Thompson, K1WUS.

By the time this report appears, perhaps Spring will be just around the corner, and the severe winter weather will be behind us.

Carolyn Brooks, AB7ET, Sec'y/Tres

Chapter 126, Piedmont

The Fourth Quarterly meeting in 1996 for this Chapter was held at the Mid Pines Country Club in Pinehurst, NC. This was the annual Christmas Party held in elegant surroundings, with a superb dinner, great fellowship, and excellent entertainment.

During a short business meeting, new officers and Directors were elected for the year 1997, as follows:

President - William Wray, K4BPH

Vice President - Moffett Spencer, WA4ORE

Treasurer - Charles Brydges, W4WXZ

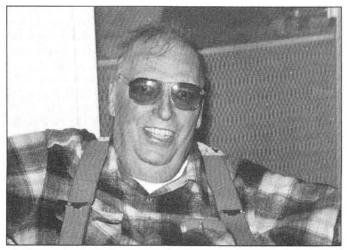
Secretary - Henry Elwell, N4UH

Directors: Walter VanGiesen, AB4DQ; Edward Naher, K8YFR and Harvey Adams, W1YJ

The last revision to the Chapter Constitution and By-Laws was done in 1984. Over the years, a change in the number of

officers has occurred, an initiation fee was deleted, easing of dues to new members joining in the last quarter of the year was made, and other minor changes have crept in. These changes were not in agreement with the above document. The Board of Directors felt it desirable to bring our Constitution and By-Laws to be in agreement with more modern practices. A complete overhaul of the document has been made, is being circulated, and will be presented to the Membership for action at the March quarterly meeting. It would be prudent for all Chapters to review their documents to see if they can be used as a management tool for the benefit of officers in their new responsibilities.

Our Chapter welcomes all QCWA members passing through the Salisbury area of NC around March 15, 1997 to come to our meeting on that date. Any of the above officers will be delighted to give you details of that meeting. Come and have fellowship with your brother QCWA members.



Don Warburg, WA6HNC, Chapter 130 vice-president

Chapter 130, Inland Empire

The members of Chapter 130 gathered at the home of K6KJK in Anaheim, California on December 14th. The Annual Meeting was conducted by President Phil, N6CMF. A catered luncheon was served and enjoyed by all. After a very good eyeball QSO session an exchange of gifts was made. It was decided that a history of the Chapter be written and as many photographs as possible used. This project is to be handled by the Chapter Secretary.

Chapter 137, Shenandoah Valley

Meetings: Third Wednesday of odd-numbered months, at 12:30 PM; Carper's Valley Golf Club, 1401 Millwood Pike (Rte 50 East), Winchester, VA; reservations requested.

Information: Perry F. Crabill, Jr., W3HQX, (540) 662-7526, 225 Milam Dr., Winchester, VA, 22602.

Fourteen members and guests of QCWA Chapter 137 met at Carper's Valley Golf Club on Route 50 east of Winchester, Virginia on Wednesday, November 20, 1996. A social period at 12:30 PM was followed by a buffet luncheon at 1 o'clock. The meeting was conducted by Vice President Charles Ander-

son, NF3X, in the absence of President Walter Johnson, WA4HVU.

Reading of the previous meeting's minutes and the Treasurer's report were waived by a motion approved by the members. John Kanode, N4MM, Chairman of the Nominating Committee, offered the following nominations for officers in 1997: President, Charles Anderson, NF3X; Vice President, John Kanode, N4MM; Secretary-Treasurer, Perry Crabill, W3HQX. There were no nominations from the floor. Nominations were closed by a motion and the candidates were elected by a unanimous ballot.

John Kanode reported on ARRL and FCC matters. Gate 2 for the Vanity Call program received 3800 applications on the first day. The Northern Shenandoah Valley DX Club was assigned NS4DX as requested. Synthetic aperture radar appears to be a new threat to the amateur 440 MHz band. In September a special event station at the Kennedy Center in DC used the call K3C. It was visited by 5,000 to 10,000 people, including various officials and celebrities. Pictures were to appear in December QST.

Charles Anderson called attention to the forthcoming IEEE ENC Society program to be presented at the McLean Hilton on May 1, 1997.

The speaker was Paul Reid, N4EKW, Spectrum Manager for the Federal Emergency Management Agency. He talked about Spectrum Management for the Atlanta, Georgia, 1996 Olympic Games. This was the largest RF event in history, with over 200 countries participating. Although various other agencies had been doing planning for two years, FEMA was not assigned the Federal Frequency Management Role until April of this year.

The plan evolved included a frequency approval process, interference reporting procedures, and a means of resolving disputes. FCC direction finding teams with the latest equipment did the tracking down of interference. Main problems were intermodulation, shared use of channels, and operation on unauthorized frequencies. Some of the latter situations were caused by misunderstandings and failure to follow proper procedures. In one case it was necessary to escalate the issue to the highest level at the Pentagon.

The lessons learned from this operation will be applied to future activities with mass communications such as the Presidential Inauguration.

The meeting adjourned at 2:42 PM, with the announcement that the next meeting will be held on January 15, 1996, at the Silver Leaf Restaurant on Valley Avenue in Winchester. Perry Crabill, W3HQX, Secretary/Treasurer

Chapter 138, Marconi

on January 21, 1997 the Marconi Chapter 138 quarterly luncheon meeting was held at the Howard Johnson's restaurant in Middletown, NJ. There were 28 members present. Joe Dreifuss, WA2GSY, VP presided over the meeting for Bob Buus, W2OD, who was absent. The reports of the secretary and treasurer were accepted as read. At the meeting a vote was taken to forward a donation to QCWA National for the scholarship fund. Silent Keys K2FD, George Miller; and W2KIY, Harry Musselman were respectfully recognized. Also, the chapter voted to forward a donation to the Guglielmo Marconi Foundation, USA for a charter membership. This organization is planning to open a new Marconi museum this summer in Bedford, NH and plans to have rela-

tives of Marconi at the ribbon cutting ceremony. As a special treat the Foundation sent a tape entitled "The Day All Radio Waves Went Silent" concerning the passing of Marconi on July 20, 1937 to be played at the meeting. It was a copy of the WOR Mutual Broadcasting System special broadcast and contained the voice of Marconi himself. The tape was well received. Phil Petersen, W2DME, plans to rebroadcast parts of the tape over the 10 p.m. Tuesday night Marconi Chapter Homebrew News net (147.045). Under new business an election of officers was held: Joe Dreifuss, WA2GSY, is president; Joe Strockbine, W2KCO, is VP; Bernie Ricciardi, WB2EJT, continues as secretary; and Leta Ladd, WA2QCE, continues as treasurer. Installation will be held at the annual Sunday afternoon dinner meeting on May 4th. Finally, the guest speaker was Roy Edwards, KB2LUO, last year's Chapter 138 Public Service Award recipient. Roy is currently running for the position of New Jersey ARRL Section Manager. He asked the membership to get involved with the legislators so that they know what HAM radio is all about because we are in danger of losing our precious frequency bands. Roy wants us to especially get involved with the youth. He outlined a program to do this at the schools and asked the QCWA with their vast experience and knowledge to help. Roy is a person of impeccable credentials and this chapter is proud to support his candidacy. For further information on matters contained in above please contact the secretary, WB2EJT.

Bernie Ricciardi, WB2EJT, Secretary

Chapter 142, NW Ohio

At the November 1996 monthly meeting the main item of business was the election of chapter officers for the 1997 year. The Nominating Committee Chairman, Clayton Grice W8BCQ, presented a slate of candidates. All four of the incumbents were on it with only the office of vice-president having an additional candidate. The contender, finding that the existing officers were willing to serve again, withdrew his name from nomination.

Nominations from the floor were requested. A second candidate for president was nominated, the nominations were voted closed, and we were given ballots with only the office of president in contention. One can imagine the tense excitement while the votes were counted. As it turned out, the incumbents were returned to office: President ,Dave Walker, W8FKI; Vice-president, Al Cooper, W8BHL; Treasurer, Dave Alexander, W8GD and our perennial, excellent Secretary Bob Hanna, K8ADK. The chapter looks forward to 1997 with the chapter's activities well in hand under the guidance of these dedicated hams.

Our chapter roster is updated yearly and copies are distributed to the members. Dave Alexander, W8GD and Ken Wright, W8NOT, et al, take care of the compiling and printing and do a superior job. Listed are the member's phone number, birthday (w/o year), QCWA number and membership expiration date. Officers, committee heads and charter members are also designated. That's in addition to the usual call, name and address info. They are very complete, except.....no e-mail addresses. No space for them either.

An increasing number of the Chapter 142 members are getting online for E-mail through various servers. Recognizing that most of those who have this capability would like addresses of the others, Jim Apsey, K8JA and Ken Wright, W8NOT filled the gap. They've made a list of member E-mail

addresses which Ken computer-printed on card stock. About 1/3 of the chapter members are included and we already have had to pencil in more. Interesting that there are six different servers being used with AOL and JUNO tied for the most. Not long ago it would have been COMPUSERVE and PRODIGY. It surely is a very competitive and rapidly changing communication industry.

K.G. Bullock, W8YDJ

Chapter 143, North Colorado

The past two or three seasons have been disastrous for the North Colorado chapter. Keys have been silenced at an alarming rate. Supposedly we "mature" people should expect these things, but when they happen, they seem to hap-

pen in unpleasant, untimely bunches.

Since the last JOURNAL a half dozen treasured chapter members have left our ranks for those of the Silent Keys. Three people who participated in the chapter's founding signed off permanently: Rudy Fleischer, WØNST, whose "no snow tonight" phonetics always brought a smile. Ever-present Hank Adams, WØAEE, followed soon after, then Carl Smith, WØBWJ, and Dovey Colvin, NØGOE. We had recently lost our chapter vice president last summer, Richard Stevens, KAØSGS, and ever-friendly Gale Powers, WØOKH. We'll remember them all, and hope they're scoring DX contacts galore from that great antenna farm in the sky.

Northern Colorado's big club is NCARC, and one of its activities is the winter Superfest. They defy Colorado's legendary (though actually not deserved) bad winter weather reputation and hold a hamfest in mid January. This is always successful. Hams seem to find a way to make the Loveland, Colorado, get-together. This year the chapter rented a booth, not to sell surplus gear, but to solicit new QCWA and Chapter 143 members. We displayed a banner reading, "Were you licensed in 1972?" The bait proved effective, but most of "the

fish" got away.

We had taken advantage of Jim Walsh's "QCWA care package" deal and had lots of fun pitching patches, decals, baseball caps etc. and passing out literature. It wasn't a sparkling success, but we had fun and had a chance to renew old acquaintances and make some new ones. Nice part of it was, no heavy gear to carry in (and out!) and no hardware axes to grind. Nice relaxing morning.

Next chapter gathering will be our annual Valentine tribute to the XYLs who put up with us year after year. A surprising number of them are hams (Four are QCWA members.)

Not every chapter can have its Valentine's Day in the appropriately-named city of "Loveland." We do! So happy Valentine's day from the "Golden Triangle" of North Colorado: Ft. Collins, Greeley and Loveland.

Jim Fahnestock, WØOA

Chapter 149, Nutmeg

The November meeting of Nutmeg Chapter was held on Saturday, November 9, 1996 at the Paradise Restaurant, located in New Britain, CT. There were 64 members and guests in attendance for this quarterly luncheon meeting, which was conducted by Chapter President, Wayne Shaffer, W3QAN.

Secretary Don Steele, W1NFG and Treasurer Owen Garner, K1AF, presented their respective reports, which were both accepted.

Activities and Net Manager Cal Bennett, W1KHL, reported that the Nutmeg QCWA net is very active Sunday mornings, with an average of 15 check-ins at each session. The net meets every Sunday at 1130 local time on 3923 kHz. All are welcome to check in.

President Wayne presented a certificate of appreciation to our guest, Chet Bacon, KA1ILH, for his valuable work in reorganizing the Chapter's Administrative and Financial Data Base, and creating a new computer program for use by our Secretary. Chet was assisted in this valuable endeavor by Rich Aubin, WA1TRY, who was not present to accept his certificate.

Al Cohen, W1FXQ, introduced our special guests who presented an entertaining program featuring impersonations of Mark Twain and his Lady Olivia.

The door prizes were won by K1UQV, W1UBM, W1UKL, XYL of W1VLA, and W1FXQ's sister.

The next luncheon meeting is scheduled for February 8,

Walt Kornacki, W1YOC, Vice President

Chapter 162, Southeast Wisconsin

A meeting of the newly elected Board of Directors of the Chapter was held on 29 October 1996 at 8:30 PM at the Racine Red Cross building for the purpose of electing officers. Results were re-election of: N9NBC, Kenneth L. Knoff as President; WB9IJY, Robert J. Burgermeister as Vice President; and WØWLN, Robert N. Jensen re-elected Secretary-Treasurer.

The November Chapter meeting was held at the Wustum Art Museum in Racine at 7 PM November 18 with 11 members and two wives attending. A tour of the museum exhibits, featuring water colors by Wisconsin artists, was followed by a short business meeting at which a chapter name badge was presented to K9AAL, George Pagels. A committee was appointed by the President to obtain nominations for the Olie Fox Award, established as a memorial to former member Olin Fox, K1AKG who had become a Silent Key. The form of the award was to be determined by the committee, and the award to be made at the annual Southeast Wisconsin Amateur Radio Banquet early in 1997.

Our December meeting was the annual Christmas party held at the Meadows Restaurant in Franksville, Wisconsin at 1:00 PM Sunday December 15 with 27 members spouses and guests attending. After a fine meal a business meeting was held and after adjournment a gift exchange.

The high Yuletide spirits were somewhat dampened by the announcement that member Bruce Zabler, K9RRS had become a Silent Key. Donations as memorials were sent to the Racine Hospice Alliance and to QCWA headquarters for the scholarship fund.

The first chapter meeting of 1997 was held at the Southport Restaurant in Kenosha at 7:30 PM January 20, attended by 13 members and 3 wives. A chapter name badge was presented to new member Don Buska, N9OO, and a Certificate of Appreciation from QCWA headquarters for helping with the 1996 QCWA election vote count was presented to Bob Burgermeister, WB9IJY, along with congratulations to Bob for having passed the Extra Class license exam. W9GKM, Chuck Knotek, presented a schedule of events for the chapter for 1997. It was

announced that a local bedfast ham had requested help with upgrading his Tech class license, and several members offered to provide encouragement and help.

Secretary-Treasurer WØWLN reported that information from QCWA headquarters indicated that four chapter members were delinquent in their national QCWA dues. Efforts are being made to ensure the delinquencies are remedied.

The committee appointed to select the Olie Fox Award winner reported they had unanimously decided on a winner who would be presented the Award at the annual Southeast Wisconsin Ham Banquet to be held March 8, 1997.

Robert N. Jensen, WØWLN, Secretary/Treasurer

Chapter 165, York County

The annual Ladies night and Christmas party for Chapter 165 was held on December 7,1996.

The group gathered at Alexander's Family Restaurant In York, PA, at 11:00 AM for a social hour and the luncheon was served at 12:00 noon. The 28 members and guests dined on stuffed chicken breast or baked ham. After the dinner a short business meeting was held. The meeting was called to order by Ray Shaub, W3AXC the Secretary/Treasurer, due to the fact that Bill Steinfelt the President had to leave after the meal and our Vice President Carey Green, K3IIB was in the hospital.

How to get new members was the topic of discussion under old business. It was decided to give prospective members a free dinner on the chapter if they will attend one of our meetings and if they join, to give them an official QCWA name badge as an incentive for joining our Chapter.

The meritorious service award was presented to Ed Kirby, W3YQJ for his years of service as our Secretary/Treasurer.

Under new business the dates and locations for the next two quarterly meetings for the chapter were decided. The March 8 meeting will be held at the Stoneybrook Family Restaurant, 3468 E. Market St., York, PA, and the June 7 meeting will be our annual outdoor picnic to be held at the Eastern Hemlock Pavilion in Rudy County Park.

Each of the ladies in attendance was presented with a poinsettia flower and the meeting was adjourned at 1:45 PM.

Ray Shaub, W3AXC, Secretary

Chapter 168, Oregon Trail

Our Spring Chapter luncheon meeting of 1997 will be held on Saturday, April 12, 1997. The location will be the same as our October 1996 meeting, J J North's Grand Buffet Restaurant, 10520 NE Halsey St. in Portland. The time is 11:30 AM. If you are a QCWA member but not a Chapter member, feel free to stop by and become acquainted. We would enjoy having you join us for this event. Members bring your spouse or a guest.

We regret to announce the passing of Chapter member George Wise, W7MB to the ranks of our Silent Keys in December 1996. George was a long time member of this Chapter and will be greatly missed from our meetings. The Chapter has made a donation to the QCWA Memorial Scholarship Fund in memory of George. May he rest in peace.

A short business meeting will be held following the luncheon. After business a drawing will be held and door prizes given to the lucky ticket holders. Please attend, you could be a winner.

Fred Behrman, K7LNS, Sec'y/Treas

Chapter 169, Sacramento Valley

Our monthly meetings are held on the 2nd Wednesday of each month, at the Lyons Restaurant, located at 1000 Howe Ave. here in Sacramento. Meetings generally get started at 7.30 AM, and terminate at approximately 9.30 AM. Usually, we have a good breakfast, followed at 8 AM by our business meeting, after which there is a speaker, and/or a program of general interest. The program for the day concludes with a raffle and prizes.

At our Sept 1996 meeting, our speaker for the day was Timothy Maybee, the Div. Chief - Emergency Medical Services of the Sacramento County Fire Department, and Medical Aid.

Our October, 1996 speaker for the day was Hal, K6ENQ, who gave us an interesting description of events covering his vacation trip thru Alaska, British Columbia, and Alberta. His narration was as though we were in the same vehicle and enjoying the same experiences. All of us should experience a similar vacation at some time in our lives.

We were welcomed with another fine speaker for Nov. 1996. He was Arlen Cravens (the son of Armond Cravens - W6JDL). Arlen gave us an excellent presentation on the history of smoke jumping - the equipment used, along with the type of aircraft and parachutes used - the qualifications and training necessary for a smoke jumper's job. Arlen set up a dummy display depicting existing equipment, showing 100# of gear that smoke jumpers had to carry - most certainly this would be a difficult task for a senior citizen.

Again, in December of 1996, we were rewarded with a talk by Richard Redding - a SMUD Nuclear Instructor for General Employment Training. Richard spoke mostly on the subject of safely disposing of low-level radioactive waste, as produced, for example, by the Rancho Seco Nuclear Power Plant, here near Sacramento, also the low-level radioactive waste facility in Richland, Washington.

We have an interesting speaker each and every monthalong with a varying degree of attendance - usually in the 25 to 40 range. We try to have at least one or two speakers "in the bank" in the event of a cancellation - or possibly illness.

All radio amateurs are cordially invited to attend our meetings. Please contact our Pres. of Chapter 169, W6RLP, Paul Wolf at (916) 489-8112 or (916) 331-1830, or myself, Bill Hendrick, (916) 925-5858, NS6D.

Bill Hendrick, NS6D, Sec/Tres

Chapter 173, Golden Triangle

This report covers the activities of the golden Tri-angle chapter 173 for the meetings of 6/8, 7/13 and 8/10/96. After a long search for a new meeting place, Chapter 173 has settled down at the Boulevard Grill, Route 441 in Leesburg. All

meetings are held on the 2nd Saturday of the month at 12:30 PM. A poll of the membership indicated that the luncheon meetings were preferred over breakfast by a wide majority.

President Potter welcomed new chapter members Tom Riley, WA5KHU and Otto Alexander, KI4JI. Other new members are pending their National QCWA membership. The chapter voted to send \$100 to the scholarship fund at the national office.

KS4LT has assumed duties of net manager (more like rail-roaded) and reports that since moving the weekly net back to 7 PM, attendance has increased considerably.

The members are all receiving birthday cards thanks to Edith, KM4JP; and those with a wedding anniversary get a 10 foot long banner!!



Officers for 1997: Pres. Ken, KS4LT; Ed, W6GXC, outgoing Pres.; Vice-Pres. Roger, W9JRY; Sec/Tres. Tony, W3JRD.

A few members have up-graded to extra class. Among them is KS4LT and Henry, W3DJE. Oh, I forgot to mention that Henry did it at 84 years of age!

Homer, AB4O is looking forward to his 70th class reunion. It seems like there are only 3 members of the original class left! Homer also informs us that at 92, his recent annual physical was A-OK.

Chapter 173 met on December 14 at the Boulevard Grill in Leesburg, Florida. The highlight of the meeting was the annual election of chapter officers for 1997. At the meeting, the nominating committee presented the following slate: President, Ken Lappe, KS4LT; Vice-President, Roger Harper, W9JRY; Secretary-Treasurer, Dominic (Tony) Sagolla, W3JRD.

By a not-even-close vote of the membership, the proposed slate of officers was elected.

Our secretary/treasurer took advantage of the vanity call sign program and had his 1939 call restored. WB3KSP is once again W3JRD.

Although not yet a member, Edith, KM4JP deserves a note of thanks from the chapter. Edith sends birthday and anniversary cards to all members of the chapter, and helps out with NCS duties whenever we get caught short on Tuesday nights.

Although social and informal, we probably get more chapter business done during our weekly net than at the monthly meeting.

During the past few months several of our members have been on the sick list, some with major surgery, including W8HFK and W3JRD. All are recovering nicely.

Our 92-year old Homer, AB4O and his friend Marie ran the QCWA booth at the LARA hamfest in November. 94-year old Bill, K4GGF still climbs Mt. Dora daily! Something about our Florida weather....

Ken Lappe, KS4LT

Chapter 188, Lost River

Lost River Chapter #188 meets in Klamath Falls, Oregon each month on the third Thursday for a luncheon meeting. At the January 1997 session, we had 20 members and guests attending.

Secretary Don Nichols, W7IEO brought to our attention that a few members have been dropped from the National QCWA list because of delinquent dues.

Members present were reminded to check their expiration dates for QCWA and also their FCC licenses. We were all reminded of the QCWA membership drive for 1997.

We regret to report a Silent Key in 1996, Emery Boring, W6IIF who had been a QCWA member since 1962 and he had been issued #3347 at that time. Several nice articles have been written about him since his passing. Emery was a real asset to ham radio.

All our members are looking forward to Spring and another good year.

Carolyn Brooks, AB7ET, President



L to R: Gordon, W1GFJ; Pete, N1ASJ; Jerry, AE4WZ; John, W3NHO; Eugene, KS4SD; Ed, W2AFD; Bud, K2BJA.

Chapter 196, Edison

The Edison Chapter had a very pleasant brunch at Perkins Family Restaurant in Ft. Myers on the last Tuesday of November. All members of Chapter 196 were present except G.E. Sammons, WA4DQE who had an appointment at the "Salt Mine" and was unable to attend.

It was nice to welcome W3YMB, Ed Yoder and NZ3D, Gene Kordowski back to Southwest Florida for the winter. Ed returned in time to man the QCWA table at the recent Ft. Myers hamfest.

John Marshall, K4GVI, informed us that he had been reissued a former call sign. He is now K3ZLE.

We had two guests join us. Mike, K4CD, and Frank, WB4AFF helped make our meeting a success.

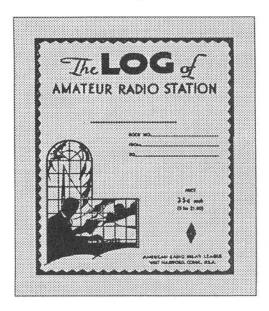
A collection was taken up. We now have a Treasury and our Chapter Banner has been ordered. The membership's generosity is greatly appreciated.

Tad Burik, WASPXL, President

The JOURNAL is available free to blind paidup members on audio cassette tape. For more information, contact Blanche Randles, W4GXZ, (May 1-October 1) 44 Western Ln., Amherst, MA 01002. 413-253-2858; (October 1-May 1), 6002 N. Fremont, Tampa, FL 33604, 813-870-0867.

ADD TO YOUR COLLECTION

A Beautiful Reproduction of a 1936 Logbook



Remember those days?

Add this to your collection

Better Yet ..

Buy a copy for your station and enjoy its format

Now available from:

QCWA Inc.

159 E 16th Ave

Eugene, OR 97401

\$ 6.00 per copy

Our thanks to Tracy Reese, WB6TMY, who fell in love with this era of amateur radio and conceived and furnished the art work.

In cooperation with ARRL, the Quarter Century Wireless Assn., Inc., presents this special edition.

QUARTER CENTURY WIRELESS ASSOCIATION, INC.



159 East 16th Ave., Eugene, OR 97401-4017 541-683-0987 Fax - 541-683-4181

This form for use by all U.S. applicants for membership in QCWA.

Effective 4/1/96

For Office Use Only

Membership No.

Date

First Licensed, Year

Deposit Record

Ĭ	Depos
(Please Print Name Clearly)	Present Callsign
having been licensed as an amateur 25 or more years a	ago and presently holding the call listed al
managery to have been ligared the entire 25 years) her	

Have you been previously enrolled in QCWA? _

having been licensed as an amateur 25 or more years ago and presently holding the call listed above (it is not necessary to have been licensed the entire 25 years) hereby apply for membership in QCWA. I understand that proof of the original date of licensing is required. My complete mailing address is:

Street Address City State Zip
I will keep QCWA Headquarters advised of changes in my address and/or callsign. My first amateur license was issued______Other calls held_____
I wish to become affiliated with QCWA Chapter_____
Date of birth_____Birthplace_____
Present occupation/business _____
If retired, what was major life work? _____
Other organizations you belong to_____

Your signature____

SCHEDULE OF MEMBERSHIP FEES

Select one of the following plans Family Members QCWA dues for a one-year period \$20 QCWA dues for a two-year period \$35 \$50 QCWA dues for a three-year period \$12 \$90 QCWA life membership \$300 Payable in 3 equal installments \$105 of \$105 each, in a one-year period \$315 (3 payments of \$35) Initial registration fee, all new members - \$3 Gold membership pins are available, your call engraved, no year tags. Check type of fastener. Year tag pins - 25, 30, 35, 40, 45, 50, 55, 60, 65, 70 or 75 (tie-tac only) - \$15 each Proposed by ______, Callsign _____, No. ____

New Members

DATE NUMBER	NAME	CALL	CITY	STATE	SPONSOR	
10/30/1996 28529	LORIA, ZEFF	K2IOG	PT JEFFERSON STN	NY	KATE SAUL,	AE2Z
11/01/1996 28530	BUTMAN, HW	NB9A	LEESBURG	FL	ROGER HARE	PER, W9JRY
11/04/1996 28531	CREIGHTON, C E	AA8DO	ROSCOMMON	MI	DARIUS DUS	TMAN, K8SSZ
11/05/1996 28532	SZUMERA, MARTY	KG2JB	LAKEWOOD	NJ	•	*
11/05/1996 28533	SCHIEFFERT, ROSE A	WAØWVR	ST PAUL	MN		
11/05/1996 28534	FRANKE, KLAUS	DL2AYJ	JENA,	GERMANY	H J HAUTSCI	H, DL1JOE
11/05/1996 28535	MUELLER, WERNER	DL1LWM	LEIPZIG	GERMANY	H J HAUTSCI	H, DL1JOE
11/05/1996 28536	FATUM, ALFRED	DK4QO	GLADBECK	GERMANY	WENER K LE	MBCKE, DL1ZC
11/07/1996 28537	COE, JIMMY E	K5MBO	DAVIS	OK	GNE NAILON	I, K5DLE
11/07/1996 28538	NAYLOR, JOHN T	WB4OMN	CLINTON	NC		-
11/11/1996 28539	TABLER, DENNIS K	W5DG	ADEL	IA	(-)	-
11/11/1996 28540	WILSON, JAMES L	WA5CUY	MENDOTA	CA	90	:=:
11/12/1996 28541	BRUNER, DONALD	WB5IEK	BETHANY	OK	(* (*
11/12/1996 28542	JARMAN, TIMOTHY T	KØUX	SIOUX CITY	IA	AL SMITH, W	ØPEX
11/15/1996 28543	DE BOER, HARVEY C		ROCKLIN	CA	PAUL RHOAD	OS, WB6TUT
11/18/1996 28544	GARDNER, JOHN L	K6RER	KAILUA-KONA	HI	DEAN MANL	EY, KH6B
11/18/1996 28545	WILHITE, SUE	KC5SMJ	OKLAHOMA CITY	OK	(#)	: * :
11/18/1996 28546	LOVE, JAMES M	W8KUG	LANSING	MI	J E HEWITT,	K8DHN
11/18/1996 28547	WRIGHT, K D	W8CA	GRAYLING	MI		
11/19/1996 28548	RILEY, ROBERT W	K9AJP	DYER	IN	(+)	
11/19/1996 28549	SCHLARMAN, K J	W0AKI	OVERLAND	MO	CARL WIDEL	
11/20/1996 28550	HASSALL, DAVID R	WA5DJJ	LAS CRUCES	NM	ART BLOCK,	W3YK
11/21/1996 28551	MUELLER, KENT	KB2WZP	CLIFTON	NJ	(*)	
11/22/1996 28552	MC KEOWN, S A	KU2O	ENDICOTT	NY	(*)	1 - 0
11/22/1996 28553	PERKINS, R A	WA7SNY	ASHLAND	OR		1#2
11/22/1996 28554	RINEHART, N L	K4FXO	WINSTON-SALEM	NC	(*)	-
11/25/1996 28555	BRADLEY, PAT	W4PAT	TEMPERANCEVILLE	E VA	43	-
11/25/1996 28556	BROOKS, RALPH C	N6YRY	PACIFICA	CA	-	-
11/25/1996 28557	TROUTMAN, FR	W4UPZ	ISSAQUAH	WA	(#)	240
11/25/1996 28558	EGALKA, RONALD M	KIRE	FRAMINGHAM	MA	•	
11/25/1996 28559	GRAFF, KENNETH S	W4PJX	INDIALANTIC	FL	9	*
11/25/1996 28560	LIVINGSTON, N V	W5FE	VAN BUREN	AR	-	•
11/26/1996 28561	MC DANIEL, C A	KC4CRT	SHARPSBURG	GA	-	*
11/29/1996 28562	BARCLAY, DAVID L	WA9YOR	JOHNSTON CITY	IL	-	
11/29/1996 28563	BULLARD, DON W	WØKRD	MARION	IA	-	*
11/29/1996 28564	ROSENTHAL, V B	K2VCO	FRESNO	CA	(a):	(#)
11/29/1996 28565	TOTH, DALE J	W3DT	APPLE VALLEY	CA	S.	-
12/02/1996 28566	ANDERSEN, W A	WB9PMI	MILWAUKEE	WI		(a)
12/02/1996 28567	BUGGICA, SAMMY	KY4G	TAMPA	FL	J F STROM, K	
12/02/1996 28568	SHETLER, ARCHIE	WN3DHI	TITUSVILLE	FL	J F STROM, K	
12/02/1996 28569	WEAVER, D A	KØJPW	OSAWATOMIE	KS	CHUCK ALBI	RECHT, NØCKW
12/03/1996 28570	NEWTON, JOHN B	WA1MHG	FORESTDALE	MA		ELMAN, WIDO
12/04/1996 28571	TREWIN, DAVID W	KR4U	ST PETERSBURG	FL	WILLIAM A F	
12/05/1996 28572	FUJIMOTO, AKIRA	JR1VAY	TOKYO	JAPAN	SADAKUNI Y	UCHI, JE1CAY
12/06/1996 28573	FOLEY, L G SR	K8CDE	CINCINNATI	OH	*	340
12/09/1996 28574	KELTER, LEONARD J	K9LJ	MILWAUKEE	WI	-	
12/09/1996 28575	SMALLWOOD, L E	KW4V	CASSELBERRY	FL		
12/09/1996 28576	TURNER, W C JR	WA4HAM	CHATTANOOGA	TN	CHARLES E	
12/10/1996 28577	BECKSTROM, W S	WH6AVF	HILO	HI	DEAN MANL	
12/10/1996 28578	DUFF, GARY K	KN7HTK	SEATTLE	WA		RECHTL, K7DFW
12/10/1996 28579	FAIVER, KENNETH L	W8HNI	LANSING	MI	J HEWITT, K	BDHN
12/10/1996 28580	ROBBINS, DOUGLAS	W2DR	ALPHARETTA	GA	-	*
12/10/1996 28581	WEREN, ARTHUR D	W9FSE	NAPERVILLE	IL	(4))	•

DATE	NUMBER	NAME	CALL	CITY	STATE	SPONS	SOR
12/12/	1996 28582	REAZER, JEAN S	K8JAO	LEBANON	ОН	G M REAZ	ER III, W8YH
	1996 28583	WRIGHT, BARRY W	K4WWY	CALHOUN	GA	-	
	1996 28584	GILLENWATER, W L		MECHANICSBURG	PA		
12/16/	1996 28585	SLACK, JOHN W	WA2BGB	DAVIE	FL		-
12/16/	1996 28586	KIDDER, CRAIG S	W8CK	GRAND RAPIDS	MI	KEN WRIC	GHT, W8CA
	1996 28588	BROHN, STANLEY J	W5KGG	BATON ROUGE	LA		ON, WA5EML
12/23/	1996 28589	BEAULIEU, G W	WAØPFS	KANSAS CITY	MO	B MC GRA	NNAHAN, KØORB
12/24/	1996 28591	CRANDALL, LEO K	K6QIF	SACRAMENTO	CA	PAUL WO	LF, W6RLP
12/24/	1996 28592	TREMBLY, BILL D	W5VWZ	ALBUQUERQUE	NM		22
12/26/	1996 28593	CALVERT, JESSE R JR		GRANTS PASS	OR	-	-
12/26/	1996 28594	KNIGHT, R C	WIBCA	NORWAY	ME	(a)	-
	1996 28595	ULLRICH, LE ROY C		WORTHINGTON	MN	DONALD	JOHNSON, WØJBX
12/27/	1996 28596	KENNEDY, G M	KD7ABK	EUGENE	OR	-	-
12/27/	1996 28597	RAY, CHARLES L M	W9LT	BUNKER HILL	WV	JOHN KAN	NODE, N4MM
12/30/	1996 28598	LA PORTE, G B	K1VHR	NORTH ATTLEBOR	RO MA	4	125
12/30/	1996 28599	PERRY, DENNIS R	W7AV	UNION GAP	WA	-	2
	1997 28600	BUGEN, PAUL	WA3TUC	GLENSIDE	PA	DICK MC	CLELLAND, W300
01/01/1	1997 28601	ZIECH, THOMAS L	WB6RDP	YUCAIPA	CA		RETTIG, K6GGS
	1997 28602	SANFORD, M E	NH6WS	PAHOA	HI		NLEY, KH6B
	1997 28603	RICHTER, G M	KA7KRW	WEST VALLEY	UT		ARRETT, WA7MEL
	1997 28604	JOSEPHSON, A	K6SIW	BAKERSFIELD	CA		
	1997 28605	KAMBAYASHI, J H	JH3XCU	YOKOHAMA,	JAPAN		
	1997 28606	AIGNER, JAMES F	KA7IYS	KENT	WA	-	
	1997 28607	ELLIS, LESLIE R	WBØFTL	ALDEN	MN	-	
	1997 28608	KAPLAN, RICHARD	WB2CUT	METUCHEN	NJ	-	
	1997 28609	KITCHEN, C E	WA8IDV	SYLVANIA	OH	ROBERT N	HANNA, K8ADK
	1997 28610	MURDOCK, DIANE	WA7LQV	LYNNWOOD	WA		
	1997 28611	FRIESS, ROBERT E	N6CM	LOS GATOS	CA		-
	1997 28612	HEMMINGER, W R	WA8GOI	AVON	OH		-
	1997 28613	BILOUS, WALT	WA2DQB	LINDEN	NJ		
	1997 28614	ANDERSON, MIKE	WV7T	GREAT LAKES	IL	BILL HAW	ES, W9ERG
	1997 28615	ANDERSON, RHODA		GREAT LAKES	IL		ES, W9ERG
	1997 28616	BRANDON, LARRY	AC5EZ	MESQUITE	TX	120000000000000000000000000000000000000	
	1997 28617	BROWN, CHARLES E		PORTALES	NM		
	1997 28618	LEAR, ROBERT S	K4SZ	DAHLONEGA	GA		
	1997 28619	BECKER, ANDREW R		ST LOUIS	MO	CARL WID	ELL, KDØIR
	1997 28620	DEMONTROND, G A		HOUSTON	TX		OCK JR, WA5EJQ
	1997 28621	FRITZ, EARL BUD	WA3BOM	BETHLEHEM	PA	RAY BILGE	
	1997 28622	MERRILL, R W	W1QMK	AUGUSTA	ME		**************************************
	1997 28623	JANICEK, LOUIS	N2CYY	RAMSEY	NJ	2	war in the second
	1997 28624	WEST, DANIEL R	K6DRX	CAMAS	WA	2	S1 11 11 11 11 11 11 11 11 11 11 11 11 1
	1997 28625	HARPER, JACK	KCOLR	EVERGREEN	CO		2
	1997 28626			SPRINGFIELD	MO	IRA HAWK	INS, WØPUI
	1997 28627	PARFITT, DALE R	W4OP	LANTANA	FL		-
	1997 28628	POWER, F N	WA2WYE	TRENTON	NJ	IOHN B PO	OWER, W2AXU
	1997 28629	VAN BUSKIRK, TOM	K6TV	DOWNEY	CA	-	-
	1997 28630	THEISEN, R C SR	W2SW	NICEVILLE	FL	_	
	1997 28631	TIFFT, CHARLES F	W6RD	CERES	CA		
	1997 28632	DOWNING, JOHN	W2NA	LEUCADIA	CA		
	1997 28633	HAMMOND, A S	KØHWE	ATKINS	IA	W FITZPAT	TRICK, KBØYD
	1997 28634	KINSEY, WILMER O	WB5DCU	SHERMAN	TX	-	
	1997 28635	JEFFREY, JOHN J	WØZU	DELMAR	NY	_	
	1997 28636	KLUWE, PAUL	W8ZO	MANCHESTER	MI		
	1997 28637	WATSON, WAYNE	WB8ZWW	SPRINGFIELD	OH	JOHN EDE	L K8LBZ
	1997 28638	ADAMS, KEITH I	WA3RBK	MILL HALL	PA	-	
	1997 28639			NASHVILLE	TN		
		BONE, WARREN L	KQ4X			RONALDI	HONTZ, KB3IF
U1/ Z1/ 1	1997 28640	HONTZ, DONALD K	VOEVA	LEHIGHTON	PA	KONALDI	TIONIZ, ROSIF

New Members, continued

DATE NUMBER	NAME	CALL	CITY	STATE	SPONSOR
01/21/1997 28641	KONTOR, K C	WA8IAU	CHESTERLAND	ОН	WES RANDLES, W4COW
01/21/1997 28642	PETTIT, W S III	KD4UPX	STONE MOUNTAIN	GA	WES RINDLES, WICOW
01/21/1997 28643	SHAUGHNESSY, P L	K4ND	MONCKS CORNER	SC	C B JOHNSON JR, WA4ECG
01/22/1997 28644	JOHNSON, W M	WB5CDX	CROWLEY	LA	C B JOHNSON JR, WATECO
01/22/1997 28645	ZIEMANN, KLAUS	DK5OE	HEILIGENHAFEN,		WERNER LEMBCKE, DL1ZC
01/22/1997 28646	COX, EVERETT E	W5OXJ	YUKON	OK	GEORGE CLARK, W5JKK
01/24/1997 28647	GOODMAN, BYRON	WIDX	E HARTFORD	CT	LEW MC COY, W11CP
01/24/1997 28648	NELSON, T L JR	W6QVB	DAVIS	CA	LEW MC COT, WHICH
01/24/1997 28649	PROSSER, H T III	KK1B	OVIEDO	FL	AL LA PETER, W2IL
01/27/1997 28650	DAEBELLIEHN, J W	KC9YQ	MOLINE	IL	AL LA FETER, WZIL
01/27/1997 28651	WATSON, T M	WBØIKT	RAYMORE	MO	B MC GRANNAHAN, KØORB
01/28/1997 28652	BEAVENS, C R	W5BLR	PORT ARTHUR	TX	LARRY BRANDON, AC5EZ
01/28/1997 28653	JONES, BOB W	WA5UZM	WICHITA FALLS	TX	CHARLES NEAL, W5NRI
01/28/1997 28654	MILLER, ELVIN W	W9LAB	TULSA	OK	NORM WILSON, W5FLO
01/30/1997 28655	OBST, JOHN E	WB9IXZ	INDIANAPOLIS	IN	NORM WILSON, WSI EO
01/30/1997 28656	BLOCHER, H F SR	W4YWH	HIGHLAND HGTS	KY	WALTER E KECK, W8IIO
01/31/1997 28657	ABBOTT, G E JR	K8GA	DEARBORN	MI	WALTER E RECK, WOHO
02/04/1997 28658	LEMLEY, D G JR	W8HRQ	AURORA	IL	DONALD G L SR, W8DL
02/04/1997 28659	REAVES, JOEL C	WB4ZLB	JACKSONVILLE	FL	JOHN YOUNG, WA8KNE
02/04/1997 28660	POSSENRIEDE, E B	W5VKY	OKLAHOMA CITY	OK	GEORGE CLARK, W5JKK
02/06/1997 28662	CLARKE, JAMES F	K2GYR	BELLMORE	NY	KATE SAUL, AE2Z
02/06/1997 28663	DESSON, E S	VE3PI	NEPEAN,	ONT	KEITH BEDAL, VE3GFI
02/07/1997 28664	BRADFIELD, L E	KØTIW	FT MYERS BEACH	FL	TAD BURIK, WASPXL
02/07/1997 28665	DAILEY, CHARLES J	KØEOD	SPRINGFIELD	MO	GARY HARRISON, KØBC
02/07/1997 28666	SIEB, EDWARD	VA3ES	OTTAWA	ONT	KEITH BEDAL, VE3GFI
02/07/1997 28667	DREWNIANY, F J JR		CORAL GABLES	FL	BLANCHE RANDLES, W4GXZ
02/07/1997 28668	LEEPER, BARRY C	WB8EAV	CORAL SPRINGS	FL	BLANCHE RANDLES, W4GXZ
02/07/1997 28669	SERRANO-QUINONES		SAN JUAN	PR	WES RANDLES, W4COW
02/07/1997 28670	그들이 얼굴하다면 어느 어느 어느 아니는	AB4ZE	PEMBROKE PINES	FL	BLANCHE RANDLES, W4GXZ
02/10/1997 28671	BREMER, C C	WI4O	GREENVILLE	NC	BLANCHE RANDLES, W4GXZ
02/10/1997 28672	BRODERICK, ROBERT		FORT LAUDERDALE		JEFF BEALS, WB2OUK
02/10/1997 28673	CARON, ROBERT L	K4GP	NAPLES	FL	BLANCHE RANDLES, W4GXZ
02/10/1997 28674	COLLIER, BARRON I	L. T. J.	CODY	WY	CROFT TAYLOR, VE3CT
02/10/1997 28675	DIEGO, RON	W2DO	BOCA RATON	FL	WES RANDLES, W4COW
02/10/1997 28676	KIEFFER, V B III	WAOUSA	PALM BEACH GDNS		BLANCHE RANDLES, W4GXZ
02/10/1997 28677	SHAFER, ROBERT	W7FZ	OGDEN	UT	BLANCHE RANDLES, W4GXZ
02/10/1997 28678	CRAIG, EDWARD S	NITV	NEWTON	MA	BRUCE DEAN, K1VPJ
02/10/1997 28679	DERVISHIAN, E	W9VSU	LINCOLNWOOD	IL	BETTY E SANDBERG, W9STR
02/10/1997 28680	MC ALLISTER, C E	WA6ZRZ	PORTERVILLE	CA	ED COWLEY, W6ARE
02/10/1997 28681	MORRILL, R C	KB6SH	NORTHRIDGE	CA	
02/10/1997 28682	SCHWEIN, D M	WA8WHM	WEBBERVILLE	MI	BOB BANTA, K8PVA
02/10/1997 28683	SCHWEIN, DAVID L	W8MFR	WEBBERVILLE	MI	BOB BANTA, K8PBA
02/10/1997 28684	SHETRONE, R F	WA8WFL	FT MYERS	FL	TAD BURIK, WASPXL
02/10/1997 28685	MONROE, PAUL	W9MEH	JANESVILLE	WI	(<u>2</u>)
02/10/1997 28686	SWIDERSKI, M J	K4HBI	NORCROSS	GA	JUD WHATLEY, W4NZJ
02/10/1997 28687	WATTS, EDWARD B	W1HS	STONINGTON	ME	
02/10/1997 28688	WATNE, RICHARD A		CONCORD	NC	× ×
02/11/1997 28689	OVIATT, ALBERT F	AH6EG	CLARKSTON	WA	A S CUTTING, W7ENQ
02/11/1997 28690	AHASIC, ALAN R	W9AN	BATAVIA	IL	¥
02/11/1997 28691	GRETLEIN, R C	KE6TYH	SAN DIEGO	CA	2 2
02/12/1997 28692	JACOBS, ALLAN E	W8TCI	OXFORD	MI	ROBERT A ERSKINE, WB8EQG
02/13/1997 28693	ROTEN, DENNIS	KC8D	ORRVILLE	ОН	¥
02/14/1997 28694	COBB, TERRY L SR	K6ME	JANESVILLE	CA	DON FREEMAN, W7FD
02/14/1997 28695	NOSSAMAN, G	NO5P	CLIFTON	VA	-
02/17/1997 28696	KASPER, JOSEPH	K6CBF	DIAMOND SPRINGS	CA	PAUL WOLF, W6RLP
-					

SILENT KEYS

with sadness we record the passing of these members

WIASB, John O'Donnell, #06321, Port Richey, Fla K1CBV, Herbert G. Clark, #15581, Cromwell, Conn. KIFTY, Frank C. Hubbard, #22904, West Hartford, Conn. W1MM, Robert M. Stephens, #03156, Holyoke, Mass. WIUPB, Bruce B. Adams, #26787, Lincoln, R.I. KIVNE, Thomas R. Abare, #25473, Saxtons River, Vt. K2FD, George C. Miller, #15786, Perth Amboy, N.J. KA2FFI, Richard S. Hill, #15689, Colchester, Conn. N2GOF, John J. Mulhern, #15957, Red Bank, N.J. WB2GYS, Gerald G. Silverman, #22460, Tinton Falls, N.J. W2HPB, Joel E. Bachner, #21048, West Laen, Penn. W2KIY, Harry Musselman, #10264, Forked River, N.J. W2MK, Frank Buckley, #06136, West Seneca, N.Y. W2NW, Stuart W. Farmer, #02932, Buffalo, N.Y. W2OXG, Walter N. Hill, #23298, Brooklin, Me. WM2Z, Walter G. Schleicher Jr., #21762, Sebastian, Fla VE3AFW, Alvin F. Dike, #11611, Mt Albert, ONT VE3DEE, Melvin R. Howarth, #08477, St. Catharines, ONT W3FDW, Russ S. Schaeffer, #05093, Birdsboro, Penn. W3FEA, William J. Findley, #19846, Parkesburg, Penn. W3HKP, Harry B. Heckman, #06137, Reading, Penn. W3PJ, Mel Hastings, #22448, Severna Park, Md. W3UHM, S. Muszynski, #05529, Carnegie, Penn. W4BUB, Edgar C. Powers, #06893, Easton, Md. KK4DL, Ruth C. Cutcher, #22999, Toledo, Ohio K4GVV, Thomas D. Giles Jr., #15863, Panama City, Fla W4IIA, William T. McAninch, #09107, Washington, D.C. DJ4JT, Rudolf Lex, #20927, Arnsberg, Germany K4JYF, Ned K. Gressle, #15586, Herndon, Va. K4LMB, Ethel M. Smith, #02491, Mc Lean, Va. W4LRB, Charles W. McDormand, #05678, Cape Coral, Fla W4MZZ, Harry M. May, #10719, Knoxville, Tenn. KR4NA, Warren M. Hanna, #23708, Mt Dora, Fla W4PNM, James Taylor, #24338, Augusta, Ga K4QK, Rafael J. Hecht, #01201, Longboat Key, Fla K4QX, David O. Guthrie, #13543, South Hill, Va. W4SZ, Svend T. Gormsen, #06959, Tampa, Fla WF4V, Erwin J. Donadt, #15167, Port Richey, Fla K4ZK, William R. Jochimsen, #09135, Jensen Beach, Fla W5AXO, Robert H. Williams, #13711, Fort Worth, Tex. WA5FRJ, Russell D. Guill, #26327, Amarillo, Tex. WA5JQW, Ralph G. Tobey, #25256, Fort Worth, Tex. W5KWH, Charles W. Palmer, #08567, El Paso, Tex. WA5MEE, Velma L. Jester, #23031, Hobart, Okla. W50DH, James A. Carter Jr., #21608, Baton Rouge, La. W50Q, Vernon Dillaplain, #13434, Little Rock, Ark. K5RC, Glenn M. Knappenberger, #08171, Hewitt, Tex. K5VRL, James M. Williams, #22212, Oklahoma City, Okla. K6BD, Robert F. Goldman, #24398, Woodcrest, Calif. WB6EAK, Clifford F. Smeby, #23252, Long Beach, Calif. VE6LY, Stanley F. Mitchell, #22688, Edmonton, AB K6RXP, Leland E. Williams, #09780, Pismo Beach, Calif. KH6UZ, Alfred C. Dildine, #20629, Kaunakakai, HI KJ7AD, Richard B. Sinsel, #24670, Yakima, Wash.

W7ADT, Bert A. Oscarson, #01739, Seattle, Wash. W7AFN, Kenneth A. Curtis, #23789, Tidewater, Ore. W7BKM, Harold R. Schneider, #10310, Whitefish, Mont. KA7CHM, James F. Chames, #25765, Elk Grove, Calif. W7HGO, V Jack Vussell, #11193, Hayden Lake, Id. VE7JT, P M McIntyre, #06090, Langley, BC W7JVH, O L McClelland, #02218, Corvallis, Ore. K7KSA, George A. Lunbeck, #15604, Story, Wyo. W7KXH, James M. Gates, #07779, Sierra Vista, Ariz. AB7LR, Anthony R. Morice, #27686, Cave Creek, Ariz. W7MB, George A. Wise, #17940, Portland, Ore. VE7MX, Ivan Spears, #10677, Whiterock, BC W7QR, Marvin E. Leisy, #13731, Tacoma, Wash. W7RZY, Harry A. Roylance, #11988, Livingston, Mont. W7SDW, Chester B. Liechty, #13190, Salem, Ore. W8AFP, Michael B. Underwood, #11429, Stow, Ohio K8AJC, Lester K. Hosford, #21360, Eagle, Mich. W8GJH, Francis E. Gary, #02241, Traverse City, Mich. W8GQZ, Leo W. Brandt, #05610, Houghton Lake Hts, Mich. W8GSP, John F. Stauffer, #02598, Lansing, Mich. W8HEZ, Gilson R. Pearsall, #15564, Mason, Mich. W8JYB, Kenneth L. Noble #17367, Rockford, Mich. W8MH, George A. Klassen, #05746, Euclid, Ohio NZ8N, James A. Millar, #20610, Cuyahoga Falls, Ohio W8NWY, Guadalupe Alviar, #22737, Muskegon Hts., Mich. K8RSH, Charles Early, #18296, North Ridgeville, Ohio WASSVX, Kenneth H. Gehres, #25278, Parma Hts, Ohio W8TZ, Milton C. Fruehauf, #00329, Columbus, Ohio W8VVB, Edwin C. Bennett, #05068, Lexington, Tenn. W8WY, Cliff Keihl, #12770, Dayton, Ohio W9ANC, Daniel J. Maxwell, #09209, Green Bay, Wisc. W9KLN, Robert O. Mayer, #13895, Milwaukee, Wisc. W9OBB, George D. Cox, #18686, Minnetonka, Minn. W9RG, Robert Gumm, #19451, West Bend, Wisc. K9RRS, Bruce B. Zabler, #20190, Racine, Wisc. W9TAY, Andrew B. Chismar, #19977, Streator, Ill. WØAEE, Henry M. Adams, #09683, Aurora, Colo. KØBTZ, Raymond J. Vickland, #21354, Omaha, Neb. WØBWJ, Carl L. Smith, #09614, Denver, Colo. KØCFM, A Cecil Stoner, #18771, Wichita, Kan. NØFIT, Harold C. Stavermann, #18365, Aurora, Colo. KØGGI, Aruther M. Skramstad, #14648, Cooperstown, N.D. WØHAH, Robert Stanek, #19204, Minneapolis, Minn. WØMYE, Allen Rose, #25006, Broomfield, Colo. WØPDH, Charles L. Gillespie, #08593, Neligh, Neb. NØRB, Robert O. Boller, #11264, Hermitage, Mo. WØWYX, Frank A. Swanlund, #03038, Cedaredge, Colo. WØYZV, Dick L. Eilers, #13749, Omaha, Neb.

Please Note: Before we can publish SK information we need an obituary notice, funeral notice or a note from a family member. Please send all information to QCWA Headquarters.

DXpeditions and American Principles: Must We Choose?

by George H. Shands, W9WUU, 1117 Wellesley Road, Madison, Wisconsin 53705

or some thirty years I was absent from the ham bands. My Viking II transmitter and S-40B receiver lay mute in their boxes while Joan and I pursued our careers, family and community life. As I approached retirement, I realized that I wished to re-enter ham radio as one facet of the new life ahead of me. Joan agreed. After all, I had been a ham when we met, and so too were her father and brother. Jumping the gun a bit, I resumed ham activity on the HF bands in the fall of 1995. Subsequently, I retired in June 1996 and soon experienced the joys of my first Field Day in 41 years.

As I tentatively re-entered the world of amateur radio, I was not surprised to find myself falling in love all over again with chasing DX. With 100 watts, a vertical antenna, and living in the middle of the country, chasing DX is a challenge. I've started from scratch toward earning DXCC and hope to be able soon to allocate more time toward this goal.

There is a small cloud on the horizon, however, that concerns me and which creates for me something of a dilemma. The dilemma for me is whether Americans should participate in DXpeditions to countries having governments which flagrantly violate their citizens' human and political rights. It is this concern that I wish to address.

The Issue

One of the great technological changes that occurred after I left ham radio in the mid-1960s was the development of the personal computer. The computer - with its internet - now provides access to various DX sites from which we can learn of current and prospective DXpeditions. At the same time our old-fashioned daily newspapers keep us informed about events going on in countries toward which a few of these DXpeditions are headed. In order for a DX team to gain access to a country, team members must work closely with the host government. Sad to say, dictatorial governments exist in the world, treating very harshly those citizens who object to their governments' practices. Collaborating with any one of these repressive governments for the purpose of establishing a DXpedition may give the appearance that we hams approve that government's treatment of its citizens. In a world seeking more democracy, is that the message American hams wish to convey not only to the citizens and government of these countries, but also to the world as well?

I believe we American hams need to consider the question of how we can enjoy our DX challenges while at the same time remain true to our historic American principles. I hope to stimulate some discussion of this matter.

The End of Cold War Clarity

When I first was licensed in 1953 until the time I left the air in 1965, the United States and our allies were in the most frigid part of the Cold War with the Soviet Union and its allies. The tensions were palpable (even to a young ham in his late teens) and the threats and fears were real. Our foreign policy revolved around variants of containment of communism with the corollary threat of nuclear annihilation. To a great extent, our Cold War foreign policy drove our domestic policy. As a young ham, when I worked the few stations that I was able in the USSR and eastern Europe, I had the sense at times that I was hobnobbing with the "enemy." It all was quite

clear in those days: there were good guys and there were bad guys-and we surely knew the difference.

Today that cold war apparently is over. The old antagonisms that we Americans harbored toward our former adversary first waned, then vanished. Clearly, the world has changed. Missing today, however, is the clarity of that old Cold War. The focal point of the USSR and communism has disintegrated and we now face decentralized concerns and hot spots around the globe. Today's grays in foreign policy are in marked contrast with yesterday's clear understanding, and in general we find it more difficult to analyze world conditions and to pursue appropriate responses. This uncertainty about how to respond to foreign events, I believe, carries over into ham radio, making it easier for us hams to avoid hard choices by our overlooking certain unsettling realities in the world. After all, if our foreign policy experts lack unanimity about foreign affairs, what then are we non-experts to do?

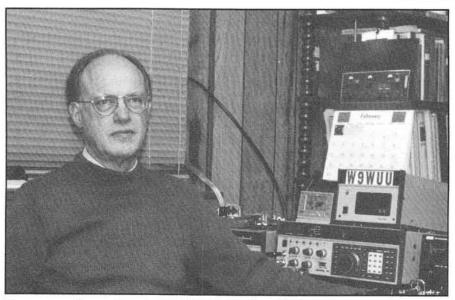
As an American radio amateur, I question the extent to which we should work with governments that oppress their citizens and violate their human rights. The practice of mounting DXpeditions to sites controlled by repressive governments creates the appearance that for radio amateurs, narrow DX self-interest precedes American principle(s). What principles? Among others, the principles that democratic government exists of, by, and for the people, that the people choose their government through open and fair elections, and that a government once voted out must step aside for the newly-elected government. One principle that is paramount for Americans is that the individual citizen has rights that even a powerful central government must respect.

Most of us would subscribe to the Churchillian view which asserts that democratic government is the worst form of government - except for all the rest. We understand that governments - like people - are not perfect, but realizing this, I believe, should not be used to rationalize working with a repressive regime. We are licensed and regulated as radio amateurs by the United States government; thus what we do, to a degree, may be interpreted by citizens of other countries as receiving the approval of the United States.

Myanmar-A Case Study

Let us consider a specific case. Over the past year, we have found ourselves supporting DXpeditions to Myanmar (Burma), eagerly awaiting our chance to add another country to our DX total. In so doing, what criteria did we select when we chose to send a DXpedition to this nation? What criteria would we select to support, for example, DXpeditions to North Korea, Iraq, or Iran? While Myanmar has been making headlines in both ham news and international news, it must be clear that the question I raise transcends that country alone. There are plenty of governments in the world that serve up a bitter existence to their citizenries (or which represent threats to peace or which practice or tolerate terrorism.) For the time being, however, let us take a closer look at Myanmar's conditions.

In Myanmar (Burma), the government is a military junta known as the State Law and Order Restoration Council (SLORC). In 1988 the SLORC took power in Burma, killing over 3,000 peaceful, pro-democracy demonstrators, jailing



The author, George Shands, W9WUU in his hamshack

thousands, and closing schools for three years.² During the summer of 1996, the government-controlled press called for a ban on any publication using the name Burma rather than Myanmar.³ Many citizens seeking democracy for Myanmar were arrested and jailed, some being sentenced to long prison terms.⁴ Many quit the pro-democracy party, according to an Associated Press report, because they were threatened with jail or the loss of jobs, homes and pensions. The A.P.'s Robert Horn stated that this was the largest wave of repression since 1991 and that the regime "views its softest critics as dangerous enemies."⁵

In September 1996, the SLORC accused 1991 Nobel peace prize recipient Aung San Suu Kyi of "plotting with the United States to foment unrest."6 A scheduled meeting that Suu Kyi had planned in order to celebrate the eighth anniversary of her party's founding was banned by the government, while her home was blocked by soldiers and riot police to prevent her National League for Democracy from meeting.7 Dozens of her supporters and three European tourists were rounded up by M-16 rifle-carrying riot police. (Suu Kyi is the "widely popular" daughter of the revered Aung San who led Burma's independence movement against Great Britain. Suu Kyi was under house arrest from 1989 to 1995 for leading the democracy movement in her country. While her party won the 1990 general election with 82 percent of the vote, the SLORC refused to allow the parliament to convene.) An American State Department spokesman warned Myanmar that the United States would "take very seriously any threat to re-arrest [Suu Kyi] or to prevent her from conducting what we consider legitimate political activity."8

During the first week of October, the Myanmar government reported it had arrested 573 people, later releasing 163 of them. The number arrested included "large numbers of elected members of parliament...." The United States, the United Kingdom, and the European Union all condemned Myanmar's SLORC repression. The U. S. then passed legislation halting entry into the United States by members of the Myanmar military regime. This law banned most American assistance to Myanmar and threatened to prohibit new private American investment in Myanmar should the SLORC practice "large-scale"

repression of or violence against" the democracy movement. Meanwhile, the U.S. Ambassador to the United Nations refuted the charge that the U.S. was in collusion with the democracy movement, calling such a charge "absurd and baseless."

In November 1996, the British government charged the SLORC with intimidating pro-democracy politicians one weekend using mob attacks. A mob of some 200 attacked Suu Kyi's motorcade while members of the government's security force stood by. The British Foreign Office labeled the action as a "blatant and crude attempt to intimidate democratic politicians...a deplorable step backwards." These were the conditions faced by many of Myanmar's citizens while American and other hams were working with that very government.

In late November 1996, President Clinton criticized the Myanmar government for both its refusal to move toward democracy and its

involvement in narcotics trafficking. Both, he asserted, "represent the absence of the rule of law."

He went on to say that every nation is interested in promoting a "true political dialogue in Burma," one that would lead to "a real fight against crime, corruption and narcotics and a government more acceptable to its people."

Regardless of the international criticism of the Myanmar government, the SLORC has continued to tyrannize the pro-democracy movement to the present (early February 1997).

The ARRL's March 1996 issue of QST featured a cover story about a multi-national DXpedition to Myanmar, the "Golden Land."16 It told an interesting story about hams facing challenges both political and technical. The political part, of course, had to do with gaining permission to establish an amateur station in Yangon (Rangoon) and to broadcast from it. The author introduced his article by pointing out that Myanmar is "administered by the military" (the SLORC) and that amateur radio didn't exist in the country from September 1964 to September 1994. Much of the rest of the article describes the joys and frustrations-the latter, mostly technical-the team encountered during its stay, including some treasured sightseeing opportunities. Following his week's stay in Myanmar, the . 4thor "decided that this is one place I'd like to visit again [with its] friendly people, good propagation, beautiful sights, and a pleasant place to stay...." He thanked the organizations that supported the team's efforts and thanked both a lieutenant general, who is a high SLORC official, and the government of Myanmar for making the operation possible.17 I wondered if such praise was the required precondition for a return visit by other DXpeditions.

I was struck by the statement in the QST article that an objective of this multi-national DXpedition was "to showcase Myanmar for the world." Why, I wondered, would anyone choose to "showcase" a government like Myanmar's which represents values and practices under which none of us would choose to live. By overlooking what this host government is doing so actively and publicly to its citizens and by cooperating with the SLORC, we give the appearance that DX is so important to us that we are willing to become the SLORC's handmaidens in promoting their country-with its government to the world. It is troubling that the SLORC is using us-again

continued next page

willingly - to give the SLORC credibility in the eyes of the world even as it jails hundreds of its citizens. By our working with such a government and by praising it publicly, we, to some degree, prop up that government and extend its life. Some might say we become a part of the system which rules that country with an iron fist. In my view, we American radio amateurs have no responsibility to "showcase" any foreign government, nor is it our responsibility to provide a cover of legitimacy for a repressive government.

Myanmar, I suspect, is a nice place to visit - so long as you see no evil, hear no evil, and speak no evil. It is doubtful, nevertheless, that an American living in Myanmar for any length of time would find that freedom of speech, press, assembly, petition, habeus corpus, the presumption of innocence, and all the other freedoms and rights we have defended for some 210 years, carry much weight there. Exercise them at your own risk probably sums up the matter. Still, if we do not wish to live in Myanmar, shouldn't we then be more sensitive to the plight of those who must live there? After all, when the SLORC violates the outcome of a national election it sponsored, when it jails and prevents its citizens from exercising their rights, and when it kills Myanmar citizens who seek democracy, it seems almost bizarre to read about "the happiness and serenity of [Myanmar's] people."18 One wonders what real emotions lie beneath the mask of "happiness and serenity." Regardless of the particular country, however, a conflict appears to exist between our principles as Americans and our desire to offer a special DX contact from a country such as Myanmar. As we pursue a course that elevates the DX contact to top priority, we face choices which are not very palatable. Providing a DX opportunity from a country with a repressive government means that we must avert our eyes from the political and human realities of that place. We are forced to accept the premise that since it is not our country, it is none of our business what goes on there domestically - a defensible point, but one that carries risk too.

Ultimately we hams are faced with the question of what is the right course of action to take when we contemplate working with a repressive or dictatorial government. This is a question that we hams living in western-styled democracies may loath to consider. We American radio amateurs live in a privileged society, privileged both politically and economically. Rarely do we have to consider flagrant violations of human rights or political rights by our various levels of government. When a gross violation of rights occurs, a hue and cry is raised and an investigation is undertaken. Usually, guilty offenders suffer the consequences. While we sometimes talk trash about our national government, few of us would choose to live under someone else's government and laws. I have yet to see vast numbers of disgruntled Americans pack up and leave for other shores. Overall, we take our generally benign multi-layered governments19 so much for granted that we assume that this is how other governments work. We prefer not to be confronted with ugliness. When we are, we look away or hope the ugliness shortly will go away - just as it does at home.

Possible Refutations

Let us consider some challenges to the foregoing; I doubt that everyone who has read this far agrees with my concern or analysis. Certainly a person who disagrees with my concerns can argue the position that any contact with an oppressive government such as Myanmar's is better than no contact at all. Working with that government - to the extent that they

allow it - in an open, honest, non-threatening way might encourage that government to become less defensive and to welcome other, more significant interactions with democracies around the world. Many of these contacts, possibly, could open up better, less-threatening interactions between the government and its own subjects. Events move by degrees, and while the act of permitting an amateur radio operation represents a tiny step, one must remember that a journey of a thousand miles begins with the first step.

Our own government in dealing with China, for example, granted most favored nation status to that nation, even after the Tiananmen Square Massacre of 1989. The rationale for this action was that trade and other interactions keep open lines of communication between governments. Eventually this can mitigate the excesses of a repressive government while allowing continuing discussions of topics of mutual interest.

In the scale of things, however, Myanmar is not China; a ham expedition is in no way comparable to the billions of dollars of trade with the many jobs that trade produces within the United States. Neither is Myanmar a nuclear power nor a weapons exporter as is China. Of course, those who objected to the course of action taken by the U. S. regarding China pointed out that realpolitick, bottom-line expediency triumphed over a higher-road, human rights stance. Furthermore, one must question the notion that familiarity breeds a less-repressive government. There are just too many regimes in the world which over time have milked a photo opportunity for all it was worth, all the while squeezing its citizenry hard. Is a DXpedition to Myanmar likely to measurably improve conditions for Myanmar's citizens? I suggest such an outcome would be marginal at best.

Second, one can posit that establishing an amateur station in Myanmar is a positive good because it allows hams in Myanmar to communicate with hams world wide. Ham radio is about communicating. Communicating with radio amateurs in other countries produces a general good will among nations and their peoples - even when the respective governments may not be on good terms. One therefore supposes that American hams contacting hams in Myanmar might effect closer relations between the two countries. As it stands, however, we in the United States will be talking not with Myanmar nationals, but with American (and other non-Myanmar) hams operating from Myanmar. This simply is not in the same league as striking up a QSO with a Myanmar national. Since there were no known amateur radio activities in Myanmar for some thirty years, it is doubtful that there are any active indigenous radio amateurs there. And should the SLORC allow citizens of the country to be licensed for amateur radio, who will these licensees be? Can one expect any of the known members of the democracy movement to be granted such a privilege?

Third, one might argue that Myanmar is just one of many repressive governments in the world. If we continue whittling nations with repressive governments off our DXCC lists, sooner or later no one will be able to make DXCC. It may get to the point where we'll need to count every island in and around the United States as a country in order to make DXCC! Where do we draw the line? Where, indeed.

Fourth, a person might say that this whole discussion has political overtones. Amateur radio should keep its distance from politics. This matter does have political overtones, but working with any foreign government is political; choosing to go to a foreign country on a DXpedition is political. Without political activity, the DXpedition would not get through customs. Our ARRL

is political when it lobbies Congress for new bands or increased privileges for radio amateurs. Politics is the way we human beings make the decisions that govern our lives. Note that I am not talking about narrowly-defined political parties. I am speaking about the vast arena where humans come together to work out solutions to many of life's questions, hopefully to benefit the greater good and to do the least harm.

Some Considerations

I have no pat solutions to offer regarding possible conflict between our American principles and our DX interests in amateur radio. I offer some suggestions, however, which seek to establish a process that should move us forward toward a carefully-considered response.

First of all, we need to ask ourselves whether this a subject that we radio amateurs need to place on our agenda for discussion. Should we engage in such a discussion, I am not interested in demagoguery wherein a litmus test is established as to who is more true to the principles of the United States.

Second, the ARRL, various ham organizations (such as the QCWA and DX organizations) and publications, can open the pages of their journals and newsletters to a sane discussion of this matter. Should this occur, perhaps we can arrive at a consensus regarding how we can make considered choices among our competing interests.

Third, the ARRL through its DXCC 2000 Committee can develop principles or guidelines to help us evaluate conditions in a country under consideration for a DXpedition. These guidelines, while not prohibiting DXpeditions to countries with questionable governments, would ask American radio amateurs to weigh carefully the conditions there before we begin to cooperate with their governments. In my opinion, we should not don blinders to the suffering of citizens in other countries who are jailed, tortured, or killed for their political beliefs. I should hope that a DXpedition decision would be predicated on the assumption that the welfare of people living in such unhappy circumstances is at least as important to us as to whether we work another country for a DX certificate. In my view, we demonstrate a lack of respect for the people in such countries when we marginalize them by our willingness to overlook the grim conditions of their lives.

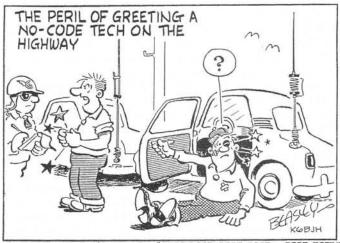
In the short run after sufficient consideration, we may find ourselves making the hard choice: that we American hams choose not to dignify a repressive government by our presence. Painful to us DXers? Certainly, but I believe such a choice would increase our standing in the eyes of both the American public and the world, not to mention our own. In denying ourselves something that is important to us, we acknowledge that DXing is not the be-all and end-all of our existence. We accept the idea that the claims of humanity take precedence-even over our favorite pursuit.

Finally, I believe we need to place our DX interests within the context of our American principles and to ask ourselves what impact should these principles have upon those of us who are amateur radio DX enthusiasts? We are not living and acting in a vacuum but in a very real world with all of its beauty and ugliness. We owe it to the world and to ourselves to maintain the highest standards for our service. Whatever we do, let us make our choices consciously and publicly following reasoned debate. To do less, in my opinion, is to do a disservice to our proud history.

To paraphrase the Olympic opening, "Let the debate begin!" W9WUU

References

- ¹ In this paper, I am addressing radio amateurs who are citizens of the United States of America. Radio amateurs in other countries may wish to consider this matter from their own perspective.
- ² Robert Horn (Associated Press), "Quiet crackdown threatens Burma's democracy party," (Madison) Wisconsin State Journal, Sep. 26, 1996.
- ³ Associated Press, "It's Myanmar, not Burma, says junta-controlled press," *Ibid.*, June 30, 1996.
- ⁴ Horn, Sep. 26, 1996
- 5 Ibid
- ⁶ Robert Horn (Associated Press), "Burma thwarts opposition leader, says U.S. plots unrest," *Ibid.*, Sep. 28, 1996.
- ⁷ Robert Horn (Associated Press), "Troops block democracy leader's home," *Ibid.*, Sep. 29, 1996
- ⁸ Horn, Sep. 28, 1996
- ⁹ Robert Burns (Associated Press), "Clinton bans Burmese rulers from U. S. entry," *Ibid.*, Oct. 4, 1996.
- ¹⁰ Robert Horn (Associated Press), "Burmese dissident says regime fears her party," Ibid., Oct. 3, 1996.
- 11 Burns, Oct. 4, 1996.
- ¹² No author's name (Associated Press), "Mobs help Burmese repress democracy; Britain protests violent weekend attacks," *Ibid.*, Nov. 12, 1996.
- ¹³ Terence Hunt (A.P. White House correspondent), "Clinton puts the rap on leaders of Burma," *Ibid.*, Nov. 27, 1996.
- 14 Ibid
- ¹⁵No author's name, "Suu Kyi urges sanctions on Burma," *Ibid.*, Feb. 4, 1997. Following secret trials, Myanmar's government announced it had sentenced 34 people to seven-year prison terms for fomenting protests in December 1996.
- ¹⁶ "DXing from the Golden Land," QST, March 1996, 28 31.
- ¹⁸ The Central Arizona DX Association, XZ1N DXpedition Home Page on the Internet: http://www.getnet.com/-kf7ay/myanmar.html
- ¹⁹I am referring to our layered system of national, state, county, and local governments.



Lee Faber, W7EH - A Ham for 80 Years

by Gerry Higgins, W7ES, Chapter 16, Sec/Treas, P.O. Box 5345, Carefree, AZ 85377

Lee Faber, W7EH, a member of the Barry M. Goldwater, Arizona Chapter QCWA, Chapter #16, was presented with the QCWA 80-Year Service Award at the January 25th regular meeting in Surprise, Arizona.

The following is material excerpted from articles by Barry Wiseman, N6CSW, Editor of ELECTRIC RADIO MAGAZINE, for a monthly series from May 1992 thru October 1992 issues. These articles were derived from interviews that he conducted with Lee and from the examination of his extensive archives. The archives consisted of photographs, QSL cards, log books, ham licenses, newspaper reports and both business and personal letters.

Lee became interested in radio in 1913 through a girl friend. She told him that her brother had something up in the attic that made a lot of noise and smelled like burning hair. Lee hopped on the caboose of a freight train to ride the 8 miles to investigate. It was there that he heard his first wireless signal and also met Art Schneider, who became his "Elmer". Coincidentally the Illinois Watch Company at Springfield, Illinois, which was about 50 miles from Lee's home in Paw Paw, started sending spark code signals every noon for an hour. Somebody there, on their lunch hour, thought they would teach people code and encourage them to become wireless operators. Art showed him how to put together a crude crystal set for a receiver and then Lee put up an antenna. He learned the code by listening to the Springfield station.

His first transmitter consisted of a Ford spark coil energized by a 6 volt battery. The spark gap itself was made of 2 binding posts with 2 pieces of pointed wire in the posts. The spark jumped between the two points. In parallel with that he had a plate glass condenser. The condenser was just a couple pieces of glass with tin foil in between. The condenser was connected across several turns of a coil made from 1/4" tubing. This completed the tuned circuit. He could adjust the condenser to get the color spark he wanted. The antenna was coupled through a coil with one end to ground. Lee commented that sometimes since they were in the attic, the ground was quite long and made a dipole out of the antenna.

Later, in 1917, Lee not only had obtained his first license, 9EH, but had a new Navy type receiver with a crystaloy detector along with a rotary spark gap transmitter. He was quite well known for his wireless activities and even had a write-up in the local newspaper, the "Lee County Times".

Lee said "A lot happened in 1917 other than getting my first ticket. I also got my high school diploma by default because I joined the Navy." All the hams were off the air during WW I and had to send a notarized statement saying all their gear was boxed up and nailed shut. Lee got back on the air in 1919 with the call 9AMK. He forgot to renew on time and was given the call W9DAX which he kept until the fifties.

In 1921 Lee attended the first ARRL convention held in Chicago, Illinois and he still remembers it well: "It was a wonderful experience because I got to meet literally hundreds of hams and also a lot of hams I had worked over the years. And I got to see all that beautiful equipment that I couldn't afford".



Left to right: Ralph Barr, WØDNO, Chapter 16 Pres.; Lee Faber, W7EH and Gerry Higgins, W7ES, Chapter 16 Sec/Treas. on the occasion of Lee receiving his 80-year award.

In 1923 Lee attended Dodge Radio Institute in Valparaiso, Indiana where he obtained his First Class Commercial License. Lee went to sea as a radio operator aboard the S.S. West Totant, which was a grain ship sailing between the Gulf of Mexico and the Mediterranean Sea. He made one trip and was seasick for a month. That spelled the end of his radio op days at sea. (At the December 7,1996 meeting of QCWA Chapter #16 Lee got to meet the daughter of one of his instructors at Dodge Institute, Ms. Bette Clemons. They had a lot to talk about!)

In 1925 Lee met the girl who was to become his wife. Her name was Ruth Mattick. She was a telephone operator. They were married on June 11, 1925. Lee commented: "She was a wonderful woman, very encouraging to me in everything I did or tried to do."

Lee, like most hams, was always interested in building bigger and better transmitters - always cannibalizing the previous set for next one. We don't have the time or space to describe all of the equipment he built and used through the years, but we can guarantee they were well built and beautiful to look at.

Lee says: "My first record of grinding crystals was in 1932. I worked a ham up in Sycamore, Illinois, 20 miles away and he was using a crystal. The tone and stability of his signal was just exceptional so I had to have one. So I ordered a piece of raw quartz from a company called 'Electro Importing Company' in New York City. I paid \$3.95 for it when my wife needed a pair of shoes. Believe me, in '32 we had no money. A nickel ice cream cone on Saturday night was a treat. But anyway I ordered the quartz (pret-near getting a divorce in the meantime)." Lee made a few crystals and was very impressed. He knew that crystals would play a big part in the future of radio. In 1932 or '33 he formed a company called Faberadio Electric Company. At first he sold crystals to hams at club meeting at Aurora, Illinois for 25 cents each to members, 5 cents down and 5 cents per meeting. Times were tough in those days. Lee met Pat Paulson who was an



Lee, W7EH (then W9EH) in his hamshack around 1954. The big transmitter on the right is a Collins KW-1. On the desk is a Collins 75A-4 receiver and a Central Electronics 10A SSB exciter.

engineer at radio station WBBM in a Chicago suburb. Pat helped him make commercial sales to NBC, CBS and other big broadcasting outfits. Faberadio continued in business until 1942 when Lee formed the James Knights Company.

In Lee's words: "Within days of the Pearl Harbor incident, I received a telegram from the War Production Board telling me that I had to supply them with a list of all the raw quartz, semifinished products and finished products I had on hand. This kind of scared me because I didn't think anyone in the government even knew I was in the business of making crystals. At that time it was just a sideline for me. And then a few days later Motorola sent a man out - his name was Elmer Wavering - to try to persuade me to get into the crystal manufacturing in a big way. They needed thousands and thousands of crystals."

"Then I got another telegram from the War Production board telling me to come to Washington. When I got there they said that they wanted me to go to work for Bendix Corporation in Baltimore in their crystal department that they were setting up for war production." Lee convinced them that he would be better off at home in Sandwich, Illinois with his family and expand the business that he had there. They asked him if he had enough money to get started and he replied that he didn't have much money. They offered him a line of credit for \$250,000.

Lee said "I just about fell out of my chair; I'd never heard anyone ever talk about that much money. In a way it scared me; at that time I was making about \$125 a month. I went back to Sandwich without talking any more about the \$250,000."

Lee was reluctant to leave his good job at the power company but he was anxious to help in the war effort, so he went to see a friend of his in Sandwich, James Knights, who was also a ham, W9HMZ. Lee told him what he was up against and asked if he could start up his crystal business in the back of Jim's electrical repair shop. Jim agreed and Lee built a 12 by 12 room in one corner, hauled in his equipment and started making crystals while still keeping his regular job at the power company. As the business grew Jim started helping Lee and

finally as Lee became apprehensive about the power company finding out about the business, he asked Jim if they could put everything in his name so they might think Lee was just helping out. That's how the James Knights Company got started.

They didn't form a formal partnership until they had been working together for a few months.

They both mortgaged their homes and came up with \$4000 each. The company started with that \$8000 and never did take any of the credit offered by the War Production Board. The company flourished during the war making an honest but sizeable profit. There were 70 companies making crystals during the war and at the end of the war the orders simply were not there. Fortunately James Knights Company was one of five to survive; the challenge now was to survive without lucrative government contracts. Lee

mentions that at this point he was able to get back on the air "and it was great. Ham radio was always - and still is - a very important part of my life."

Lee continues: "To get the JK Company back on its feet we needed all the good fortune we could get. A lot of it came our way." Motorola approached them with a big order that none of the other companies wanted. They said that if the JK Company would help them out they would help JK build their business back up. That along with some almost free machinery from Western Electric started the ball rolling. They had orders from most of the major manufacturers and by 1950 the James Knights Company was firmly established with about 250 employees.

In 1950 Lee decided to put up a mast of around 60 feet for his 36-element, 10-meter antenna. When he asked the Graybar Electric Company for a 60-foot pole they said they didn't have one, but they had a 125-foot pole that they offered to cut in half. Lee said: "My God, don't cut it off, wait 'till I get there." Lee bought the pole intact and had it delivered to Sandwich. The beam was made of surplus Army tank whips mounted on 2 1/2" aluminum tubing. Lee decided to rotate the whole mast so it was necessary to build a tower to support the mast up to the 35' level. The mast rested on a milling table powered by a 3/4 hp motor. Anyone interested in reading more about this fabulous antenna can find an article in the October, 1950 issue of QST. Lee had a well known signal around the continent of Africa.

In 1958 Lee decided he did not want to be a part of expanding the company so he sold his 50% share to some outside investors. He sold his home with the towers to a person from Sandwich and moved the family out to Arizona. After Lee left the company it was reorganized and became Chicago Telephone Supply, Knights Company and is still in business today under that name. The original James Knights Company building is still standing and contains a floral shop.

Lee is still enjoying a very active retirement life in Phoenix, Arizona, spending most of the summer up in the cooler climate of Show Low, Arizona. Lee's wife Ruth passed away in October of 1990 at the age of 83. They had been married for 65 years. Lee's former business partner, James Knights, remained in Sandwich, Illinois until his death in 1983. Lee said that he and Jim shared an office for 20 years and never had a serious disagreement. That says a lot for two fine gentlemen. W7ES

QCWA Celebrates Fifty Years

by Wes Randles, W4COW, QCWA Historian

This being our 50th Anniversary it is certainly a time to honor our Charter Members who, 50 years ago, numbered 54. At the present time there are 5 of that original 54 still living and active. We thought we would try to feature one or more in each of the issues of the Journal this year, along with some of the history.

RALPH HASSLINGER, W2CVF, CHARTER MEMBER # 23

Ralph has always been an active member of QCWA from the time of its inception. The accompanying history was written by Ralph. He calls in to the National QCWA Net every Sunday afternoon and is active on all bands during the week. Ralph has made many contributions to the Memorial Scholarship Fund and established the Ralph Hasslinger Charter Member Memorial Scholarship.

In 1921 Radio Station WAAM sent code practice at 7, 10 and 15 words per minute, every afternoon between 3:30 and 4:00 o'clock. Ralph rushed home from school to copy this code practice and for additional code practice he also copied radio station NAH located in the Brooklyn Navy Yard. As a result of all this after school rushing and then code practice he received his amateur license in 1922.

Ralph graduated from Ridgefield Park, NJ High School and while there he formed the Ridgefield Park Radio and Television Club. Some of the members of that club still meet on the air with Ralph as net control.

Ralph was very familiar with New York City and environs as his father was General Manager of the Metropolitan New York Office of Johnson and Johnson Company. In 1924, right out of high school, he went to work for RCA in the Woolworth Building where he worked until 1931. Then the depression caused thousands of layoffs all over the country, Ralph among them and for several years he worked at various jobs.

1939 brought several changes in Ralph's life. He went to work for General Offset Co., Inc., a printing company located in lower Manhattan. This is where he stayed until 1970 when he retired as Secretary/Treasurer of the Corporation.

The same year he went to work at General Offset he and Rita were married. That was January 14 of 1939. This past January 14th they celebrated their 58th wedding anniversary. They had two children, a son and a daughter. They have three grandchildren and 4 great grandchildren. Ralph loves recording their growth and their antics with his camcorder.

For several years after their retirement Ralph and Rita did a lot of traveling criss-crossing the country both north and south, east and west. They still have a lot of memories and stories to tell their great grandchildren.

In 1980 Ralph started the Ozone Club. Membership requirement was that you had to have worked spark. He knew when the club was organized that it would self-destruct because of that spark requirement which meant 1922 or before. At the height of the membership the Ozone Club had 292 members. Today it has dwindled down to just a handful due to Silent Keys. Ralph says an interesting aside was that the Club had three brothers, all members; one licensed as W2CU, one was licensed as W3CU and one licensed as W6CU. Many times all three were on the Ozone net at the same time. All three are now Silent Keys.

Last November Ralph celebrated his 90th birthday. He and Rita still live in their home in Glen Rock, NJ and still enjoy all their many activities. W4COW

QCWA History & Comments

As presented by Ralph Hasslinger, W2CVF, Charter Member #23

It was 7 PM on the evening of Friday, December 5th, 1942, in an upstairs room of Pappas Restaurant on 14th St., in New York City.

Gathered were 34 young men who unknowingly were making amateur wireless history. The 34 were amateurs, who had been licensed at least 25 years before, and were assembled because of an idea, originated during a 10-meter roundtable the month before, by John DiBlasi, W2FX; Uda Ross, W2UD; Ed Crane, W2EF; John Gioe, W2FD; Dr. Ernest Cyriax, W2DI; and Irving Groves, W2DX. All are now Silent Keys. By Dec. 31, 1947 twenty more names had been added so that the entire Charter Membership numbered 54.

There were several factors of common bondage that made for a very nostalgic evening. Licensed 25 years or more, indicated 1922 or before, which in turn meant all had operated in the old spark days — a Ford spark coil to start and working up to a KW with rotary gap, etc. etc., all operating on or above 200 meters.

Then came the development of CW, the shorter wavelengths and their world of wonders — 75, 40, 20, 10, 5, 2.5 etc., each with different characteristics to be developed, explored and marveled at. The term 'frequencies' was not in use in those days. My original station license of 1922 indicated that I could transmit on wavelengths of 180 and 190 as well as 200 meters!

World War II had ended two years before which also resulted in new equipment and stories of war experiences.

There was discussion about the name for the new group and the final result, as presented by Frank Lester, W2AMJ (W4AMJ) was "Quarter Century" for the 25 years, and "Wireless Association" to indicate an organization of members who had pioneered amateur radio from the days of its wireless spark roots. Officers elected were: President - John DiBlasi, W2FX; Vice Pres. - George Droste, W2IN; Secretary - Leon Hanson, W2FIT; Treasurer - Dave Talley, W2PF.

Meetings continued twice a year, much of the time with over 100 present. Speakers of pioneer fame included Paul Godley, Hugo Gernsback, Arthur Batcheller, Alfred N. Goldsmith, J. O. Smith and many others famous in the early days of wireless communications. All meetings 1947-1971 inclusive were held in New York. The first meetings outside New York were held in Washington D.C. - 1972; Scottsdale, Arizona - 1973; Orlando, FL - 1974; Reston, VA - 1975 etc.

As the years rolled by and more and more hams qualified, the membership increased and spread out over the United States. By 1951 there were well over 300 members. Because it was impossible for many members to travel the distance to New York, it was decided to allow Chapters to be chartered geographically, so that local meetings could be held. The first chapter was the Cleveland Chapter, chartered #1, January 6, 1951. Many others followed, totalling over 195 today.



Ralph, W2CVF and Rita Hasslinger, October, 1996, in back of his red Cadillac. Just out of view is the gold QCWA emblem. There is also one on the driver's side door.

It is regrettable indeed that the newer members will never know the romance and nostalgia generated by the development of the pioneer days of amateur wireless.

Of the 54 Charter members 49 are now Silent Keys with 5 still living including: Frank Lester, W4AMJ; Ralph Hasslinger, W2CVF; Clarence Seid, W2KW; Bill Kennedy, W2AS; and Bob Baird, W9NN.

It has been a great 50 years. In fact for me, it's been a great 75 years.

Past Presidents have been: John DiBlasi, W2FX, 1947-1964; Earl Thomas, W2MM 1965-1968; Clarence Seid, W2KW, 1969-1971; Barry Goldwater, K7UGA, 1972-1973; Frank Gunther, W2ALS, 1974-1977; Harry Gartsman, W6ATC 1978-1981; Stuart Meyer, W2GHK, 1982-1985; Leland Smith, W5KL, 1986-1989; Harry Dannals, W2HD, 1990-1994; Lew McCoy, W1ICP, 1994-1996; and our current President John Kelleher, W4ZC, 1997 -.

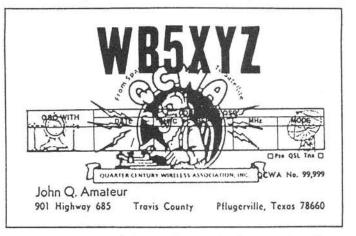
The only cloud on the future horizon is the question ---will the new members, inexperienced in wireless pioneering, and now a majority, be able to identify with the basic principles of its organizers, and continue QCWA as a fraternal time organization, or will it become just another radio club? Will the 25 years continue back to 1922 and before or will its basics become 1960 or even 1970? Perhaps some of the newer members qualify for "Quarter Century" but not 'Wireless Association'.

This has been made obvious recently by a desire on the part of some to change the QCWA Logo, designed by Charter member, W2EA, which has been a basic part of QCWA since its inception; thereby making obsolete the thousands and thousands of logos, of the past 50 years on letterheads, pins, newsletters, hotlines, pennants, certificates, etc.

Regardless of its future, QCWA's great beginning will always live on as a monument to the history of amateur communications.

We sincerely hope it will continue to grow without compromising the fraternal and historical objectives of its founders! W2CVF

Order Your Official QCWA QSL Cards Today...



QCWA QSL cards are USA standard size, printed on a heavy stock which is "coated" (shiny) on the logo side.

Ink is a bright blue with light gray QCWA logo, and you may have your call in either solid letters (above) or shadowed (right). Be certain to specify the letter style when you order.

WB5XYZ

If you want your county printed, please indicate so on the order blank. Also, tell us whether you want your state spelled out in full or printed with the standard postal abbreviation. Prices listed below include shipping.

Please print very clearly or type your order.

			h your check t	
			d 🗆 Shac	
The state of the s				
Name				
County (o)	otional)			
City				
State		☐ Spell	out 🗆 Abl	oreviate
Zip			□ ARRL	
			A)	
10-10	#		Grid Sq.	
Quantity:		\$25.00		
	□ 300	\$45.00	□ 500	\$60.00
		\$80.00		

The First Satellite Navigation System - Transit

Al Brogdon, W1AB (ex-K3KMO), 114 Lyons St., New Britain, CT 06052

t was October 1957. I had begun my two years' active duty with the US Army Security Agency, one of the "spook" agencies that developed intelligence on our county's possible adversaries by listening to their radio and radar transmissions. A class of us greenhorn second louies were at the USASA training center at Ft Devens, Massachusetts.

Without advance warning, the first artificial earth-orbiting satellite, Sputnik I, was launched by the Soviet Union. Word immediately came down from USASA HQ not to make any comment on Sputnik I, an order whose purpose was not that of avoiding a leak of classified intelligence information, but rather that of not showing our intelligence community's total ignorance of Sputnik I. As sometimes happens, we were caught flat-footed.

Thirteen years later I went to work for the Applied Physics Laboratory of Johns Hopkins University, and learned now the world's first satellite navigation system came into being. And how that system was triggered by Sputnik I..

There Sputnik I was, circling the earth and beeping out a beacon signal to show Soviet superiority to the world and in space. Bill Guier and George Weiffenbach, two APL physicists, started methodically monitoring Sputnik's transmission as did hams, scientists, engineers, and everyone in the world with an HF receiver.

Sputnik's beacon signal was just a few kilohertz away from WWV's 20-MHz signal. APL is near Laurel, Maryland, and not far from the 1957 location of WWV in Greenbelt. Bill and George started carefully plotting the received beacon frequency, using the 20-MHz WWV signal as a reference to provide very accurate frequency measurements. (Remember this was in the days of analog receiver dials whose calibration was none too accurate.)

They saw the lazy-reverse-S shape of the received frequency-versus-time plot, which was caused by the Doppler shift as the satellite's relative motion first had a component toward them, and then a component away from them. The two immediately recognized the Doppler shape, but at first had trouble matching their curves to theoretical Doppler curves. They made several discoveries and innovations that enabled them to do things such as "calibrating" the Sputnik signal's frequency. They soon became quite adept at ephemeris predictions, telling other scientists, Sputnik-followers, and the press when the satellite could be heard in various parts of the world.

The Soviets launched Sputnik II about a month after the first satellite, this time with beacons on 20 and 40 MHz. Bill and George then performed a clever analysis of the signals received on the two frequencies to remove ionosphere-induced errors. Their ephemeris predictions became even better.

The situation was a case that, knowing your position on the earth, you could perform computations to know what received (Doppler-shifted) frequency to expect to hear from the Sputniks. Or any other satellite.

So far, the two APL scientists and their coworkers had performed the careful measurements, application of theory to real-world situations, and the combination of theory and practice that are the hallmarks of the scientific mind. And they were doing very well. Enter the stroke of genius.

On March 17, 1959, Frank McClure, then chairman of APL's Research Center, had a flash of inspiration during a conversation with Guier and Weiffenbach, and saw that the equation could be inverted and solved in reverse order. That is, if you knew the satellite's ephemeris, and if you listened to its radio signal, you could perform computations to determine your location!

Bob Kershner, the system architect of the evolving US satellite navigation system, saw that a use of the system that would be even more important than navigation would be in its worldwide surveying promise, and he named the system with the informal but widely used name, "Transit."

APL's main work is as a contractor for the US Navy, and they proceeded to develop Transit, first with funding from the DoD Advanced Research Projects Agency and later with direct Navy funding. The system's official name eventually became the Navy Navigation Satellite System, or NAVSAT for those who love acronyms. (And then there was APLer Lorie Fraser, W3LMZ, now a Silent Key, who was working on what he named the Radar Antenna Transmitting System and Associated Sub-Systems.)

APL then built facilities and made use of existing military facilities to turn brilliant theory into sparkling practice.

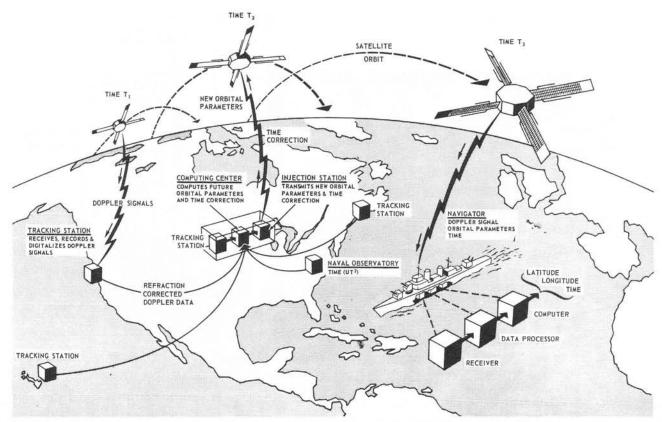
Transit satellites were built (first by APL, later by RCA) and placed in polar orbits at about 700 miles altitude, with an orbital period of about 107 minutes. At any given time, there would be about a half-dozen satellites in active service, with a few more "parked" in orbit, waiting to be turned on if an active satellite suffered a failure of some sort.

Four stations (in Hawaii, California, Minnesota, and Maine) tracked Transit signals on every pass. The data produced by these stations was transmitted to a central computing facility and used, at least once a day, via a large and sophisticated software package, to determine the contemporary orbital parameters and to prepare an ephemeris for the next 24 hours. The software also computed each satellite's clock corrections, to account for the predictable part of its oscillator drift (a few parts in 10¹¹ per day), and to calibrate all tracking-station oscillators and clocks to a common standard.

The ephemeris prediction and satellite-clock correction information were then "injected" into each satellite from a ground station and written into the satellite's memory (and refreshed, typically at 12-hour intervals, since every satellite in the system would be visible to every station at least twice a day). As the satellite sailed along, it would, in effect, broadcasting a message that said, in effect, "I'm right here right now; now I'm somewhere else; look out, I moved again!"

The Transit receiver/computer system would combine the position-information message broadcast by the satellite, with measurements of the received satellite frequency, and massage it to give a real-time readout of the receiver's location. The more satellites the system was receiving, the more accurate the position information would be. The most accurate location information, for surveying, could be derived from multiple passes of multiple satellites, observed over a period of several days.

In 1967, the system was released to industry so that receivers could be built for commercial seagoing vessels. Later on, the price of a Transit receiver dropped low enough (around a kilobuck) for small-boat private sailors to buy them. Before



An artist's concept of the operation of the Transit Navigation System. Briefly, a set of tracking stations makes measurements of the Doppler Shift from a satellite, a computing center determines the orbit and predicts it into the future, and the orbital information is stored in the satellite, which then transmits this information to the user. The user combines the orbital information with his own measurements of the Dopper shift and finds his location.

the Global Positioning System came along, there were several tens of thousands of commercial and private users of the Transit system.

You may be wondering, "How accurate was Transit?"

Commercial ships could tell where they were within less than a ship's length. A submerged Polaris submarine could poke a small antenna barely above the waves for a few minutes, and tell where it was within a yard. Surveyors could put a Transit surveying receiver on top of a benchmark and tell where it was within a centimeter or two. And, serendipitously, the accuracy of the system was perpetually better than what its designers expected.

NAVSAT continually underwent refinement to minimize the system's variables and errors, some examples of which follow: A "yo-yo" system was designed and built, to remove the residual spin from the early satellites that was induced by separation from the launch vehicle. A disturbance-compensation system was designed and built to sense the satellite's deviation from a purely gravitational orbit and then to fire small thrusters to correct orbital perturbations caused by drag from the upper reaches of the atmosphere, or by the radiation pressure of sunlight. An on-board computer was used to measure the satellite's oscillator frequency and trim it back on frequency when it started to drift (and we are talking minute amounts of drift). Following the early Transit satellites' use of a single frequency, two-frequency satellites were built, to minimize errors induced by radio propagation. And so on.

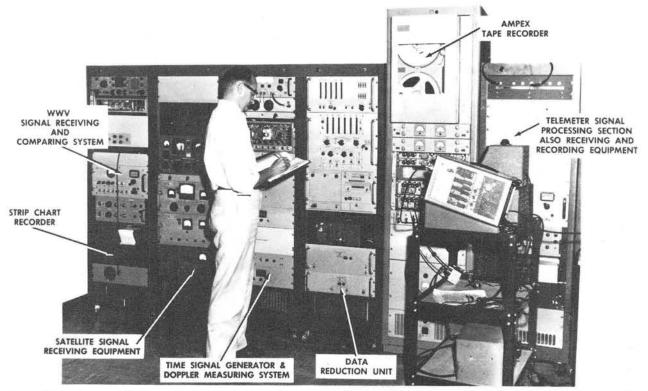
Some examples of uses of the NAVSAT system you might not have been aware of include the following: The Humble Oil icebreaker/tanker SS Manhattan used one of the first nonmilitary Transit receivers as it cruised through the Northwest Passage, looking into the feasibility of shipping oil out of Alaska's North Slope via tankers. The aircraft carriers that were used as pick-up ships for Apollo spaceflights used NAVSAT receivers to position themselves in those big, empty oceans you may recall that Apollo 12 came down within sight of the crew on board USS Hornet, near American Samoa. When the oil fields of the North Sea were surveyed and then exploited, Transit receivers determined where international boundaries lay when a difference of a few hundred feet might make a difference of a few million bucks of income.

Oops! The subcontinent of Australia was discovered by Transit surveys to be several hundred feet from where cartographers had thought it was. Portugal was also mislocated (although not by quite as large an error) until an all-Europe closed survey found out just where it was. And they even found out that APL was about 450 feet away from where they had thought it was.

Transit showed that the earth's equator is not as circular as originally thought; it's slightly elliptical. The satellite system provided data with which the earth's shape could be modeled the surface has low points around the Carolina coast, about halfway between California and Hawaii, near the tip of the Indian subcontinent, and in Antarctica; the "high spots" are in Peru, near New Guinea, near the Iles Crozet, and near Ireland. There's about 300 feet difference in elevation between the lowest and the highest points.

Transit showed that the air density at earth-orbital altitudes was much denser than anyone expected; that it varies over a range that is a factor of more than 10; and that there are daily, half-yearly, and yearly variations.

continued next page



The original Doppler tracking station at APL. The man is E.A. Kaler. This station was located in Building 1. The arrow from "WWV Signal Receiving and Comparing System" should point to the rack at the upper left, not to the center left. Originally we taped the receiver signals and made the measurements by playing back the tape. It turned out that the tape drive had the poorest stability of any conponent in the system, and we quickly devised a method of making the measurements digitally in real time.

Transit had become the ocean navigation system, the ocean oil-survey reference system; the international boundary-survey reference system, the DoD geodetic-survey reference system, and an excellent time-distribution system.

Transit has been called the most significant development in navigation since John Harrison built his fourth chronometer in 1759. (That chronometer had an accuracy of three seconds per day, and could be used to determine a ship's longitude within 30 nautical miles at the end of a six-week voyage.)

Oscar 13 (not the AMSAT OSCAR designation), the last of the operational spacecraft built by APL, was in service for 21 years and 8 months, which may be a record for in-orbit continuous operation. The Transit satellites have averaged about 14 years of in-orbit life. Some of the NAVSAT satellites were stored for up to 20 years (in dry nitrogen atmospheres) before launch. The only thing that had to be replaced between long-term storage and launch was the battery.

(One APL-built satellite was on display in the Smithsonian Institution's National Air and Space Museum for many years, hanging from a ceiling in a first-floor room near the south side of the building. The Navy needed a satellite for a particular space experiment but didn't have much money to spend. APL asked the Smithsonian if they could have their satellite back. The Institution agreed, and the satellite was dusted off, checked out, launched, and worked perfectly. Try that with your automobile!)

So when did it all end?" you might ask.

It hasn't. NAVSAT was still the official operational DoD navigation system during Operation Desert Storm, even though most military units were actually using GPS receivers. The Transit system is now being maintained by the Navy's Strate-

gic Systems Projects Office, and the satellites are still up there and being used by many navigators and surveyors. Current plans are to continue to operate the system through 1998, with an option to continue until 2000.

While working at APL (from 1970 until I retired in 1993), I was privileged to know many of the scientists and engineers who worked on the NAVSAT system and the Transit program and its follow-on efforts those named in this article and many others. And many of them are hams. I got to read a lot of their work as it passed my editorial eye in the Lab's central publications group. It was, and still is, very impressive to me. A tip of the hat to all those folks who made the Transit system the tremendous success that it became!

My Visa card from the APL Federal Credit Union has a nice color photo of the 60-foot fully steerable dish at APL that was used as a back-up site for satellite injection and various other extraterrestrial radio experiments, such as looking at the sun's radio noise. Bill Tynan, W3XO, and the guys in the APL Radio Club sometimes could wrangle Lab permission to use the dish for EME work on 2 meters. I am told that they would sometimes run the dish down to the horizon and work into repeaters far, far away.

The information for this article came from various unclassified APL publications, but I won't include a bibliography, since copies of most of the publications are no longer unavailable. The figures that accompany this article came from Lab publications.

Although APL's efforts on the proximity fuze during World War II were recently covered in a PBS television program called The Deadly Fuze, I don't know that the Transit system ever received similar coverage. It should. W1AB

"World Class CW Operator" - Eve Sanford, W4DAI

by Wayne Lott, K4WJB

It was the 1930's ... television was in an embryonic stage of engineering and technological development. Radio, on the other hand, was the technology and force bringing the world together and bringing the outside world into America's homes. Companies like RCA, Philco, and Majestic produced the radios that the American public were purchasing to hear such celebrities as Kate Smith, Bing Crosby, Arthur Godfrey, and Guy Lombardo. Of course, radio stations such as KDKA in Pittsburgh with its exceptionally strong signal seemed to make the world much smaller.

For Amateurs of that period, our world was even smaller. We were already covering the US and countries throughout the world with our signals and conversations. Like professional radio, Amateur Radio was producing its share of celebrities both past and present. How could any DXer ever forget Gus Browning, Iris and Lloyd Calvin, or Marti Laine with their world-wide DXpeditions?

One such well known operator was from Northwest Georgia. Eve Sanford, W4DAI, lived in Buchanan, Georgia and was one of the most revered 1930's Amateur operators. Then and now, she was and still is considered as a world class CW operator. Her transmitting and receiving CW skills were exceptional! She could keep up with the fastest operators for she was never one who had to request that a station QRS. Yet, she was ALWAYS very considerate of others by maintaining an equal CW speed as the operator with which she was in QSO. In those days, CW operators often had a unique or distinctive "fist or swing" to their CW and she was one of those and could be easily identified.

Her husband, Dr. E.F. (Doc) Sanford, W4DHM, got her interested in amateur radio. He was also a very active operator but became a "Silent Key" years ago at a relatively young age. With his passing, their 800 watt-input transmitter fell silent. Eve, consequently, let her Amateur license lapse and expire. Her interests turned to other areas. For example, she served as Mayor for the small town of Buchanan, Georgia for many years. Following her tenure as mayor, she continued volunteering and supporting various local civic activities and affairs for many, many years.

Amateurs in Georgia and throughout the US still reflect and speak in awe of Eve's exceptional CW skills and talents. Often referred to as the "CW Speed Queen of the US" by members of the Ham community, Eve is still remembered as "Radio Operator Extra Ordinair". Eve is alive and doing well and now resides in a retirement home in Northwest Georgia.

The above information was provided by Kerlin McLendon (ex-KN4TBX), Ralph Brewster (W4ECE - SK), and Pete Sides, W4AUP in developing this article.



Eve Stanford, W4DAI, copying CW in her NW Georgia QTH. Photo circa 1935.

A TVI Story

by Don Meadows, N6DM, 1683 Daphne Ln., Yuba City, CA 95993

rom late 1945 until around 1949, hams experienced a brief golden age. Many old timers reactivated transmitters mothballed after Pearl Harbor which were classics of prewar technology. Manufacturers were also back in the game with new commercial transmitters for hams. Most of these exhibited some cosmetic changes, but their technology was also basically prewar. Being back on the air, transmitting again on the ham bands was surely a glorious experience for the old timers. For hams first licensed around the end of WW II, being able to transmit on the postwar ham bands was a unique new experience. For everyone, it was a brief golden age whose only caution was staying out of broadcast receivers and operating within the ham bands.

Unfortunately, around 1949 this golden age ended when a new sophisticated type of broadcast receiver began appearing among the citizenry. These receivers extracted not only sound but also pictures from the air. Possession of such a device was status symbol in the neighborhood. The proud, well-to-do owner would sometimes invite selected guests to watch these pictures. Being invited was a mark of status, of social acceptance. The physical intimacy of the viewers surely enhanced their sense of belonging to a select group - one had to sit close together in front of the set in order to see the whole black-and-white picture whose total area equaled about 100 square inches.

This small screen was the Cyclops eye of a massive console which roughly resembled those of prior years designed to produce high-fidelity audio from broadcast and shortwave signals. Probably this new console was a bit fatter in order to accommodate extra power supplies and the long stem of the picture tube. In rapture, the viewers entered a new dimension. Their eyes watched the black-and-white images move about. Their ears heard every sound the images made.

A few houses away, a young ham fired up his unshielded transmitter on ten-meter AM phone, the only HF phone band then available to Class-B licensees. The young ham had been having a ball doing this for several months. During the school year, he would get on the air for an hour or so after school while there was still enough daylight left in the California afternoon to propagate ten-meter long-skip signals. At that point in history, sunspot numbers were still fairly high. The young ham exploited this opportunity and sometimes made a few contacts before darkness fell. Often his CQ's and calls to other stations went unanswered - his single 807 modulated with a pair of 42's was no powerhouse. He also discovered that he could use "ground wave" to talk to local friends regardless of time of day. Also, ten-meter short skip often opened at unpredictable times for more interesting action.

A few houses away, a new television receiver was up and running. Its owners were greatly enjoying their new status symbol, both for what it did and for what it represented. They usually activated their magic picture console only in the evening, when the young ham normally was off the air, busy with homework. But early one evening when ten-meter short skip was in, the young ham's transmitter made an unwelcome local contact. Its confirmation came not via QSL card, but through a phone call a day or so later - it had taken the magic device's owners that long to figure things out.

At first, they assumed their set was at fault. Being intelligent citizens of middle age with enough material success in the real world to afford their new device, their common sense told them that their new set, if at fault, should not just misbehave at periodic intervals, each lasting maybe five to ten minutes. Their sets picture would go crazy, often crossed by three or four heavy black lines. The sound suddenly resembled distorted tones of a young male voice. This provided the clue. Their set could not create these sounds, as it was hardly supernatural. Having already heard about how ham-radio signals could mess up broadcast receivers, they put thing together. Therefore, they looked elsewhere for a culprit.

Their attention focused on the nearby young ham's antenna, an eye-catcher in its day. It wasn't a Yagi beam on a tower, which might have been accepted merely as another new-fangled antenna required for the new television receivers. The antenna support consisted of two A-frame wooden masts. One mast was mounted on his house's roof. The other stood atop the garage. They were 70 feet apart and elevated the horizontal center-fed wire antenna about 40 feet above the earth. Both masts were painted a glaring white. This is what caught the eye, even from miles away, as the house stood on slightly elevated terrain. What's more, the masts couldn't possibly be flagpoles. They were never seen bearing a flag and there were two of them.

The first phone-call complaint from the television set owners, placed by the lady of the house (her husband was disabled) was answered by the young ham's father. He said that his son was an amateur radio operator licensed by the Federal Government and that his son was violating no regulations, then added calmly that the matter would be looked into. He was actually bluffing, because his son at the time had no clue about ham interference in television receivers, much less how to eliminate it.

The young ham had been a member of ARRL since 1946. Issues of QST continued to roll in. Around 1949, the time period of our focus, steps started being published telling how to eliminate ham-radio interference in those picture receivers. The problem was called "television interference," TVI for short. It quickly became a major topic.

The young ham soaked up every word and then decided on a bottom line. There would be no more use of 10 meters, whose harmonics were wiping out Channel 2. True, some laboratory projects like those of Phil Rand, W1DBM proved that 10-meter ham transmitters could be clean on Channel 2. But those projects were weirdly complicated electrically and mechanically, at first glance quite beyond one's immediate capabilities. The young ham's bottom line meant a significant sacrifice - no more ragchews on AM phone. Well, not quite. Some months thereafter, he installed a ten-meter mobile rig in his first car, a used 1937 Ford sedan. But that's another story.

Fortunately, there was another escape route from the local ten-meter TVI problem. One could use lower-frequency bands whose higher-order harmonics were less likely to mess up local TV sets. But this restricted a Class-B ham to the use of CW. Phone operation was legal only on 75 and 20 meters and required a Class-A ticket. The 160-meter band was still shut down. Such restrictions proved to be no great problem for the

young ham. He felt quite at home on CW. He had flunked his first FCC code test, had sat down with an Instructograph code sender for a couple months, and had copied the FCC text solid on the second try. Such effort was now paying off in making CW not only familiar, but actually rather fun with his new call W6ZGM. He now began to work 80, 40 and 20 CW without comment from the TV lady a few houses away.

Once that young ham had vacated 10 meters, things remained quiet in the neighborhood for a while. This peaceful time was devoted to intense transmitter homebrewing. QST articles based on the work of Phil Rand, W1DBM had been showing that TVI could be licked through shielding transmitters and filtering all external leads for harmonics. A linkcoupled antenna tuner could suppress harmonics reaching the antenna's feedline. The young ham followed all these directives. The new transmitter was enclosed in a wooden frame shielded with copper window screen. All external power leads were filtered. A coax link with shield braid grounded fed the antenna tuner coupled to the center-fed Zepp antenna. This new rig ran a kilowatt input to a 304TL. For a few weeks a new world of CW DXing opened up on 20 and sometimes 40 meters with the help of a surplus BC-454 Q-5er coupled to the last IF stage of a Hallicrafters S-40A receiver. Having DX come back after just one call was something brand new. Then one summer evening when the West Coast's propagation was wide open to Europe on 20 meters, the telephone rang.

My father took the call. It was the same lady with the TV set. She started out irate, but finally calmed down enough to clarify some facts. Her TV set was suddenly going haywire. Was I just then using my radio? Dad checked in my bedroom ham shack. The answer was yes. It was clear that I was violating her electronic pursuit of happiness. Not being well versed in radio, Dad got off the hook by putting me on the telephone directly.

I first asked her to describe what the interference looked like. She paused, then said it kept flashing on and off. Was it like the previous time when her picture was destroyed for minutes at a time? She said no. Could she hear any strange voices? She said no, only that the sound hummed and sounded mushy whenever the picture flashed. I then asked her if the problem involved all of her channels. She said yes. I was relieved, even a bit elated. It was clearly fundamental overload of the TV set, something rather easy to fix.

A common shortcoming of that era's TV sets was a wideopen front end. The set was designed to pick up TV frequencies but the design engineers seemed to have forgotten about radiation on other frequencies. Maybe they knew, but postwar competition dictated a design philosophy which meant cost cutting wherever possible. A story used to circulate about how the design engineers built a prototype set that barely did the job. Next they removed one part at a time until the prototype stopped working. They then replaced this part and the design was marketed.

Detailed attention in ham literature had now begun to focus on the TV receiver itself, often overwhelmed by a clean ham signal nearby that was many decibels stronger than the TV signal. Since manufacturers left the receiver's wide-open front end unprotected, the ham had to provide protection, sort of like a small-scale extortion for unharassed operating freedom. But the price was cheap.

In those days, each TV set had its own antenna, fed with 300-ohm line, usually ribbon with plastic insulation, but in some fringe areas the line was open wire to minimize losses. A simple homebrew hi-pass filter installed in the receiver's feedline often solved the TVI problem, once the ham had

cleaned up his transmitter. The idea was to filter out all signals on frequencies below the TV band which might overload

Providing the hi-pass filter was the lesser problem. Getting it correctly attached to the blighted TV receiver could be a greater problem. One kept one's own fingers off the neighbor's new TV set in order to avoid possible later charges of negligence. One rang the neighbor's doorbell and politely offered the homebrew filter, free of charge, with detailed verbal and, if necessary, written instructions about its installation.

Responding to her phone call, the young ham politely declined the TV lady's friendly invitation to enter her house and install the filter personally. He sensed risk in crossing her threshold and felt uneasy because she might expect things both from him and from his filter that both weren't up to providing. He described in detail how to install the hi-pass filter, gave her a diagram, then departed. The filter must have been installed properly, because the TV lady never again telephoned while he was on the air.

A year or so passed, and the young ham was now a soldier, far from ham radio, doing his thing in Europe for the US Army. About a year into his hitch, he heard in a letter from his parents that the TV lady had telephoned again, complaining about TVI. This time, being given the facts, she first became humble, then almost apologetic. She was never heard from again. N6DM

From MILLIWATTS to KILOWATTS

RF POWER TRANSISTORS • TUBES **POWER MODULES**



Best pricing on U.S. & Russian Transmitting & Receiving Tubes



3-500ZG • 811A • 833A • 572B

4-400C • 6146B & W • 8560AS • 8875 • 3CX400A7 & U7 3CX1200A7 & Z7 * 3CX1500A7 * 3CX3000A7 * 4CX250B & R 4CX400A • 4CX800A • 4CX1600A & U • 5CX1500A & B including full range through 4CX20,000A



Complete inventory for servicing amateur and commercial communications equipment.

Transistors • RF Modules • Trimmers • Doorknob Capacitors Heatsinks . Bird Wattmeters . Relays **Broadband Transformers & Combiners**

MOTOROLA TOSHIBA



Send for your FREE 1997 Catalog

Same Day Shipping on most orders.



800 RF-PARTS • 619-744-0700 Fax: 888-744-1943 • 619-744-1943

e-mail: rfp@rfparts.com



435 SOUTH PACIFIC STREET SAN MARCOS, CA 92069

Birthdates of the Vibroplex Keys

© 1996 by John Elwood, WW7P, 5716 N. 34th Dr., Phoenix, AZ 85017

As a key collector I have been asked many times to date Vibroplex keys. At first it appeared nearly impossible to do, so I decided to undertake a project that would help us know how old and when our keys were made. It's been a long job starting in 1990.

I'll start with serial numbers and aproximate dates, then list the sources for my dates, such as when the keys were first/and last advertised, patent dates, sales slips, Vibroplex's addresses over the years, information from owners, etc.

After the above dates had been ascertained, other dates were determined by extrapolation of the figures.

Remember, these are approximate dates but I feel they are very close. It appears that Vibroplex assigned blocks of numbers for different models of keys between 1905 and 1915.

KEY	SERIAL NUMBER
ORIGINAL	400 - 4416
DOUBLE LEVER	6010 - 6014
DOUBLE LEVER	D5015 - D5310
ORIGINAL	9,000 - 9,999
"X"	10,238 - 12,250
No. 4	B518 - B1623
ORIGINAL	20,011 - 20,788
"X"	25,090 - 26,154
ORIGINAL	50,000 - 51,814
	With the 253 Broadway address and
	later plates the serial numbers ran consecutively.

Comas have been inserted to facilitate reading the numbers.

400 - 1,286 1,287 - 2,777 1906 2,778 - 3,255 3,256 - 6,106 No numbers reported between 6,107 - 9,999 No numbers reported 1910 10,000 - 10,399 10,400 - 11,766 1912 * 20,000 - 20,621 11,767 - 12,250 1913 * 20,622 - 20,800 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 25,708 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 51,909 **No numbers reported 12,251 - 19,999 **No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916 57,269 - 60,308 1917	NUMBER	APROX. YR
2,778 - 3,255	400 - 1,286	1905
3,256 - 6,106 No numbers reported between 6,107 - 9,999 No numbers reported 1909 No numbers reported 1910 10,000 - 10,399 1911 10,400 - 11,766 1912 * 20,000 - 20,621 1912 11,767 - 12,250 1913 * 20,622 - 20,800 1913 25,000 - 25,577 1913 * 50,000 - 50,907 1913 D5015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 51,251 - 19,999 **No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916	1,287 - 2,777	1906
No numbers reported between 6,107 - 9,999 No numbers reported 1909 No numbers reported 1910 10,000 - 10,399 1911 10,400 - 11,766 1912 * 20,000 - 20,621 1912 11,767 - 12,250 1913 * 20,622 - 20,800 1913 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 D5015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 51,251 - 19,999 **No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		1907
between 6,107 - 9,999 No numbers reported 1909 No numbers reported 1910 10,000 - 10,399 1911 10,400 - 11,766 1912 * 20,000 - 20,621 1913 * 20,622 - 20,800 1913 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 D5015 - D5310 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		1908
No numbers reported No numbers reported 1910 10,000 - 10,399 1911 10,400 - 11,766 1912 * 20,000 - 20,621 11,767 - 12,250 1913 * 20,622 - 20,800 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 195015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1915 50,908 - 51,827 1916		
No numbers reported 10,000 - 10,399 1911 10,400 - 11,766 1912 20,000 - 20,621 11,767 - 12,250 1913 * 20,622 - 20,800 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 50,908 - 51,827 1914 ** 518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 54,232 - 57,268 1916		
10,000 - 10,399		1909
10,400 - 11,766 * 20,000 - 20,621	No numbers reported	1910
** 20,000 - 20,621		1911
11,767 - 12,250	10,400 - 11,766	1912
11,767 - 12,250	*	
** 20,622 - 20,800	20,000 - 20,621	1912
20,622 - 20,800 1913 25,000 - 25,577 1913 ** 50,000 - 50,907 1913 D5015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916	11,767 - 12,250	1913
25,000 - 25,577 1913 ** 50,000 - 50,907 1913 D5015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916	*	
** 50,000 - 50,907		1913
50,000 - 50,907 1913 D5015 - D5310 1913 25,578 - 26,154 1914 ** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		1913
D5015 - D5310 1913 25,578 - 26,154 1914 *** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		
25,578 - 26,154 1914 ** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		
** 50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		
50,908 - 51,827 1914 B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		1914
B518 - B1623 1914 *No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		
*No numbers reported 12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		11/2/2017/2//
12,251 - 19,999 **No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916		1914
**No numbers reported 26,155 - 49,999 51, 828 - 54,231 1915 54,232 - 57,268 1916	*No numbers reported	
26,155 - 49,999 51, 828 - 54,231 54,232 - 57,268 1916		
51, 828 - 54,231 1915 54,232 - 57,268 1916		
54,232 - 57,268 1916		1016
37,209 - 00,308		
	31,209 - 00,308	1917

IX, AZ OJUII	
NUMBER	APROX. YR
60,309 - 64,573	1918
64,574 - 72,352	1919
72,353 - 80,960	1920
80,961 - 84,681	1921
84,682 - 88,402	1922
88,403 - 91,375	1923
91,376 - 94,316	1924
94,317 - 95,865	1925
95,866 - 99,574	1926
00 575 101 330	
99,575 - 101,339	1927
101,340 - 103,104	1928
103,105 - 103,952	1929
103,953 - 104,800	1930
104,801 - 105,648	1931
105,649 - 106,496	1932
106,497 - 107,344	1933
107,345 - 108,192	1934
108,193 - 109,040	1935
109,041 - 109,888	1936
109,889 - 110,736	1937
110,737 - 111,571	1938
111 573 112 065	- 12 E E E
111,572 - 113,865	1939
113,866 - 116,159	1940
116,160 - 118,452	1941
118,453 - 122,536	1942
122,537 - 126,619	1943
126,620 - 137,394	1944
137,395 - 148,169	1945
148,170 - 152,526	1946
152,527 - 156,883	1947
156,884 - 161,353	1948
161,354 - 165,822	1949
165,022 170,022	
165,823 - 170,292	1950
170,293 - 174,762	1951
174,763 - 179,232	1952
179,233 - 183,702	1953
183,703 - 188,172	1954
188,173 - 192,642	1955
192,643 - 197,112	1956
197,113 - 201,582	1957
201,583 - 206,052	1958
206,053 - 210,517	1959
210,518 - 217,034	1960
217,035 - 223,551	1961
223,552 - 230,068	1962
230,069 - 236,585	1963
236,586 - 240,870	1964
240,871 - 245,155	1965
245,156 - 249,440	1966
249,441 - 253,725	1967
253,726 - 258,010	1968
258,011 - 263,874	
	1969
263,875 - 266,151	1970
266,152 - 267,328	1971
267,329 - 270,152	1972
270,153 - 272,975	
	1973
272,976 - 373,006	
Only two numbers	
reported	
	1974
373,007-375,415	
375,416 - 378,752	1975
378,753 - 382,089	1976
382,090 - 385,426	1977
395 437 396 051	
385,427 - 386,951	1978

NUMBER	APROX. YR	NUMBER	APROX. YR
Portland, Maine		61,964 - 62,254	1989
386,952 - 391-230	1979	04,107 - 04,337	
4,003 - 4,955		62,255 - 65,764	1990
5,261 - 5,921	1980	04,338 - 05,334	
40,000 - 40,787		65,765 - 67,132	1991
40,788 - 42,077	1981	05,335 - 06,439	
		67,133 - 69,068	1992
Assorted nos.	1982 thru	06,440 - 07,725	
42,078 - 49,762	1984	69,069 -70,410	1993
		07,726 - 07,896	
01,185 - 01,671	1983	70,411 - 70,778	1994
01,672 - 02,158	1984	07,897 - 08,205	
49,763 - 51,710	1985	70,779 - 80,361	
02,159 - 02,645		No numbers reported	
51,711 - 54,163	1986	80,362 - 80,870	1995
02,646 - 03,132		08,206 - 08,514	
54,164 - 55,911	1987	Portland, ME &	
03,133 - 03,619		Mobile, AL	
55,912 - 60,077		80,871 - 100,499	
No numbers reported		No numbers reported	
60,078 - 61,963	1988	100,500 -	1995 (Continued)
03,620 - 04,106		• tempsottopositor	#2### \$2\$. 17.20# (3##19 C+1 +++ Sidth 1 ##1) \$ 55 \$.C

KEY ORIGINAL	START DATE/SOURCE June 1905	STOP DATE/SOURCE Still in production
	"The Commercial Telegraphers' Journal", June 1905, Pg. 32	om in production
Double	Jul 1907-Aug. 1908	E-L 1025
Lever	Nameplate from WD6DTC key	Feb. 1925 "The Railroad Telegrapher"
		Feb. 1925, pg. 32
"X"	Dec. 1911	Jan. 1923
	"The Railroad Telegrapher",	"The Railroad Telegrapher".,
	Dec, 1911, Pg, 376a	Jan. 1923, pg. 6
No. 4/	Aug. 1914	Dec. 1966
Blue Racer	"Journal of the Telegraph",	Harrison Ad.
	Aug. 1914,Pg. 15	"QST" Dec. 1966, Pg.170
Upright	Nov. 1917	Feb. 1919
	"Electrical Experimenter", Pg. 458	"Telegraph and Telephone Age" Feb. 1919 Pg. ii
Midget	Oct. 1918	Sept. 1920
	"The Railroad Telegrapher",	"The Railroad Telegrapher",
	Oct. 1918, Pg. 268	Sept. 1920, Pg . 358
Martin	c. Jul/Aug 1920	Oct. 1939
Junior	WW7P Survey	"QST" Oct. 1939, Pg, 106
No, 6/	June 1927	Nov. 1980
Lightning	"The Railroad Telegrapher",	Tufts Ad, "73" Magazine,
	June 1927, Pg. 126	Nov. 1980, Pg. 163
Champion	Nov, 1939	Nov. 1980
	"QST", Nov., 1939, Pg. 114	Tufts ad "73" Magazine,
		Nov. 1980, Pg. 163
Zephyr	Jan. 1939	1958
	U,S, Pat. 2,187,351 shows a	WW7P Survey. Last Zephyr
	Zephyr Filed 1/9/39	s/n: 201,928
Presentation	Nov. 1948	Still in production
	"QST" Nov. 1948, Pg. 138	
Vibro-Keyer	Jan. 1960	Still in production
STATES AND THE STATES	"QST", Jan. 1960, Pg. 140	Property and Service . • Control of the American American
Iambic	Dec. 1979	Still in production
	"QST", Dec. 1979, Pg. 212	
Brass Racer-	Nov, 1982	Still in production
Iambic	"QST". Nov. 1982, Pg. 162	\$460 L/355-L/30 € CV ** UN CLAMP (** 1950-L/30)
Brass Racer-	Nov. 1982	Still in production
EK-1	"QST" Nov. 1982, Pg. 162	
Straight Key-	Nov. 1996/"QST", Nov. 1996, Pg. 201	Still in production

Birthday of the Vibroplex Keys from previous page

Most Recent Patent date or Latest Patent Number

Date Range

Aug. 9 1904 - 767,303 Aug. 9, 1904 - Others pending Jan 22, 07 - 842,154 Jan 22, 07 - Others pending 842,154 - Others pending Nov. 5, 1912 - 1,043,449 1,043,449 - Others pending

Aug. 9. 1904 - Apr. 15, 1906 Apr. 16, 1906 - Jan. 21, 1907 Jan. 22, 1907 - June 30, 1911 Oct. 27, 1911 - Nov. 4, 1912 Oct. 27, 1911 - Nov. 4, 1912 Nov. 5, 1912 - Aug. 3, 1917 Aug. 4, 1917 - Mar. 18, 1918

Aprox. 1918 & 1919 WW7P Survey

March 19, 1918 - July 1920 (Start of 825 Broadway address)

Vertical Nos. (On later keys with the Bug logo)

763,303

1,178,291,

(Boulter)

1,260,008

At top of list is wrong. This patent is for a clip issued to Joseph A. Mayers, June 21, 1904. Correct

number should have been 767,303 issued to Horace G. Martin, August 9, 1904.

1,260,008 1,445,226

825 Broadway. July 1920 - Feb. 12, 1923. "The Railroad Telegrapher", July. 20, 1920, pg 274 This patent number preceded 1,260,008 plus other patents pending on Vibroplex keys.

825 Broadway. Feb. 13, 1923 (U.S. Pat. date) - Feb. 12, 1925

796 Fulton. Feb. 13, 1925 - Jan. 8, 1939

"QST", Apr. 1925, Pg. 76 (Minus 2 mos for ad to be submitted)

Magazine ads for period Jun. 1925 - Apr. 1941 shows address as either: 825 Broadway or 832 Broadway however, all keys for this period are marked: 796 Fulton St.,

1,260,008 Other pats pending

796 Fulton St. Jan. 9, 1939 - 3-26-42 (Date on J-36 key)

833 Broadway 3-27-42 --- 1945

"patented" 833 Broadway

1946 - 1963 WW7P Survey

No Pat. Nos.

1963 - 1980 WW7P Survey. New company using up

No word Patented 833 Broadway

833 Broadway plates between Sep, 1979-1980.

No Pat. Nos, No word Patented & No

1980 - Aug. 1994 WW7P Survey

street, address

RED/GREEN/BLUE COLOR BASE

START/SOURCE

STOP/SOURCE

June 1929, "QST", June 1929, Pg. 86

July 1936, "QST" July 1936, Pg. 71

VIBROPLEX PATENTS

Only Vibroplex patents listed that appear as last patent number/or most recent date on the nameplate. For a rough estimate of when your key was made, use that patent date and the next patent's filing date.

Patent Number	Filing Date	Patent Date
767,303	5/7/04	8/9/04
842,154	4/16/06	1/22/07
1,043,449	10/27/11	11/5/12
1,178,291	8/1/14	4/4/16
1,260,008	8/4/17	3/19/18
1.445.226	12/10/21	2/13/23

As I mentioned at the first of the article; this has been a lengthly project - well over six years, quite costly, data on over 3,135 Vibroplex keys and the aid of nearly 2,000 owners.

I want to say a special thank you to my wife, Edith, for all her help and patience over the years.

Another who has been most helpful is Tom French, W1IMQ.

This article deals only with the dating of the keys. For much more information on Vibroplex keys such as pictures, identification, ads, patents, modifications within models, nameplate data, etc., I recommend you purchase Tom French's latest book "Vibroplex Collectors Guide", Revised Edition. Tom's address is: P.O. Box 88, Maynard, MA 01754

A most heartfelt thank you to the many who furnished data on your keys. The first draft of this article listed each of you but it ran two and a half pages - single spaced. I'm afraid no publisher would accept that, so this paragraph will show my appreciation for your fine cooperation.

Now, when someone asks how old your key is, you can say, "The birth date of my Vibroplex key is_____". WW7P

Still Another Club Project

by Richard (Berk) Berkemeyer, WØREP, 402 Kingridge Dr., Ballwin, MO 63011

Many clubs, especially our chapters, are heavy with retirees. Many of us are pushing (or even pulling) 70 and some of our collective get-up-and-go has got-up-and-went. We don't have the energy to rough it for field day, nor can our bones handle sleeping on the ground like we did twenty-five or more years ago, but we still have a need to be needed. We still want to do something with our favorite hobby.

Many of our communities have a need for us if we only will sell them on the idea. There are a lot of functions that occur in midweek which could use our communications experience. I don't mean the big functions that happen over a weekend which are so ably supported by the large radio clubs and repeater groups, but smaller functions that are held during the week when the younger club members are busy making a living. These include (but certainly are not limited to) community or neighborhood parades, community carnivals for various charities, community concerts etc. They always seem to be missing much needed communications for the parking and handling of attendees, retrieving of lost children, first aid coordination - the list is limited only by the limit of ones imagination.

Most of the members of any club have or have access to hand-held radios as well as portables. The regular mobile rig and a battery can be used for a focal point. You normally don't need a repeater as most functions of this type take place within

an area of a few blocks or at most a mile.

Next time your club meets, ask how many members are available during the week and would be interested in forming a team to furnish this type of assistance to local groups. I'll bet almost any club can find half a dozen or more members who would like to take part. Some of us are not too mobile any more, but we can sit behind a table and operate the lost-and-found, direct attendees to and given activity, or act as net control. Others can take a folding chair and their handheld and work a specific location., while the more active members perform those tasks which require mobility.

Let's examine a few possible functions where we can help: Parades - often a community will make a parade a part of a particular celebration. They always need communications to get the units into proper position prior to the start, to keep track of the units in case there is a breakdown or accident, to help disperse the parade units at the terminal point and for medical or other emergencies. To take part in a parade, first contact the organizers. Local newspapers will alert you to what is going on in the community. I don't know of anyone who has handled a parade who doesn't wish he had had better communications. Once the initial contact has been made, you need to contact the parade marshal. This isn't the guy riding in the convertible, it's the guy who is responsible for making the parade work. Work with him in the planning. Indicate the type of communications you can make available and suggest where you think you can help. Just remember, it's his parade and he has the final say. If he's wrong, he'll remember next time and be more open to suggestions. Offer to have a member with the marshal at all times so he can send and receive necessary information. He may want radios along the route, at points that have been identified as possible problem areas (sharp turns, etc.) and on an emergency vehicle such as a truck with spare gas, a mechanic and tools etc. When the arrangements are made, your group needs to evaluate their responsibilities and be sure that everyone is prepared. Then get there early and have fun while performing a service.

Community Days: There are as many different types of these as there are communities, but they all have one thing in common they need communications. Preparation for this type of function is similar to a parade - contact the organizers, get with the person responsible for making the function go and listen to him. He will probably need help with parking, directing participants to the proper places, emergencies, lost children care, etc. One thing you need to be careful of is the type of function. Hams are not allowed to help in money making operations. We can furnish emergency communication but we can't be used to order more food or prizes sent to a booth or any other function directly connected to the making of money. There will be plenty of things to do without getting into that type of effort.

The above two examples are just samples of how a club can help your community functions. Get your members together, find out who can be available and when and then conduct some dry runs (not drills - no one likes to drill!) I think you will be surprised to find how many places you can be of help during the week when the bigger club's members are involved in making a living and can't take time off to help. And

most of all - HAVE FUN!

ESTABLISHED 1947



COMMUNICATED BY

WIRELESS 40 YEARS AGO?

JOIN OOTC!

THE OLD OLD TIMERS CLUB 3191 DARVANY DR DALLAS TX 75220-1611 PH: 214-352-4743 FAX: 214-352-5014

In the News



Fred Castenholtz, W8CJ, with his 75 Year Award.

The Radio History of Fred Castenholtz, W8CJ

Fred Castenholtz, W8CJ was presented the Quarter Century Wireless Association 75-year plaque. He was given this honor at the house of Chan Restaurant in Muskegon, Michigan on April 27, 1996. 55 members, relatives and friends attended the dinner.

Mr. Castenholtz was first licensed as a 14 year old boy in 1921. His first call was 8CDY. Since then he has held calls 8MC, 8AKL and for many years now W8CJ. He received his amateur extra class license in 1928. He still has his original license in a frame hanging on his apartment wall. An envelope in his desk holds all the ham and commercial licenses that he has ever been issued. His first transmitter was a coil from a Model T Ford. Later he used a rotary spark gap.

Mr Castenholtz was consultant on the first police radio system in Muskegon and became its chief operator and engineer in 1932. He later designed and constructed the new base station and mobile transmitters for the city. In 1950 Mr. Castenholtz was promoted to Chief of Police. He retired from that position in 1966. In 1970 he was again consulted on the County Central Dispatch System (911).

Mr. Castenholtz is a charter member of the Muskegon Area Amateur Radio Council that was formed in the 1930s. He is also Past President and Life Member of Michigan Association of Chief of Police; Past President and Life Member of Western Michigan Law Enforcement Association; Honorary Member of Associated Public Safety Communications Officers, Michigan Chapter; Past Senior Member of the Institute of Radio Engineers and Past Chairman of the Western Michigan Section; Life Member International Municipal Signal Association; Life Member International Association of Chiefs of Police; Past President Police and Firemans Benevolent Association; Honorary Member Active Life Member Fraternal Order of Police; Past Honorary Member of Muskegon Exchange Club; Member

of the First Congressional Church, U.C.C.; Life Member Muskegon Elks Lodge #274; and in 1962 Mr. Castenholtz was listed in the Western Michigan Who's Who.

One of the stories I liked best is Mr. Castenholtz's abilities to hide antennas. When living in a mobile home park in Florida his antenna was a wire taped to a cane fishing pole. He then leaned the pole against the shed. It was three years before the neighbors noticed Mr. Castenholtz didn't fish.

Mr. Castenholtz lost his wife of 60 years in 1990. He now resides in the Christian Home in Muskegon. His first question when moving was can I have my ham radio. He now operates a Icom 745. What an exciting span of radio history, from spark to tubes to transistors. Mr. Castenholtz has used them all.

Russ, K8BGP



QCWA Chapter 67 President Niel Wiegand, WA5VLZ, presents Hal Henegar, W5MDL, with his 50-year certificate and pin at the regular chapter meeting June 25, 1996. Neil claimed he had never had the honor of making a 50-year presentation before. Hal claimed that he had never RECEIVED one before either!



Jim Quinn, W9MFY, left, President of Chapter 2, presenting Everett Renfroe, W9HG with his 70-year certificate.

Chapters of	n the	Air
-------------	-------	-----

NO.			IME	NET CTRL	FREQ
	QCWA CW QCWA SSB FLORIDA SSB	WED	2000E	VARIES	7035
	QCWA SSB	SUN	2000Z	VARIES	14347
	FLORIDA SSB	SAT	1300Z	W4NWF	3955
	ELORIDA SSR	WED	1500Z	W4NWF W4NWF	7274
	NE REGIONAL SO CALIF CW	SUN	0845L	W2AUF	3917
	SO CALIF CW	SUN			
1	CLLVLLAND	VYLLD	2000L	W6WHM W8NZD	146.88
2	CHICAGO AREA	1TH	21221	11101101	147.15
4	NORTHWEST	SUN	1630L	W7PN KF7P	3655
4	NORTHWEST	SUN	2300Z	KF7P	3952
4	NORTHWEST	SUN	200ZL	W7PN	3952
5	DELAWARE VALLEY	SUN	1000L	W2EEQ	3917
6	DELAWARE VALLEY PITTSBURGH SOUTHERN CALIF.	SUN	0830L	W2EEQ N3GHI	147.03
7	SOUTHERN CALIF. SOUTHERN CALIF. UPPER MIDWEST	SUN		VARIES	145.730
7	SOUTHERN CALIF.	SUN	0900L	VARIES	3917
8	UPPER MIDWEST	SAT	0800L	WØKHG	3877
9	SOUTHWEST OHIO	SUN	1330L	W8DWT	3987
10	MICHIGAN	SUN	0800L	VARIES	3903
11	NORTHERN CALIF.	SAT	1000L	K6HIO	146.85-
11	NORTHERN CALIF.				
12	SOUTHEAST FLORIDA	WED	2000L	WA6AFT VARIES	146.76
14	SAN DIEGO	WED			145.52
16	ARIZONA	SUN	0630L		3890
17	ALLENTOWN-BETH	SUN	1200L	VARIES	3990
19					147.15
20	MISSOURI BALTIMORE CANTON OHIO NEBRASKA	MON	2100L	W3EE	147 285
21	CANTON OHIO	THU	1930L	WASDRT	146.79
25	NEBRASKA	TUES	1900L	WØHXL	
25	NEBRASKA			VARIES	3982
28	CENTRAL NEW YORK	SUN	1530U	VARIES	3917
29	FINGER LAKES	SUN	1230L		3900
30	WEST VIRGINIA	SUN		W8UQ	3865
31	FINGER LAKES WEST VIRGINIA READING	MON	2100L		146.91
32	GATOR	SAT		VARIES	145.29
33	CLUID ED COLL DELIN LICH	**	20001	W3APE	3982
35	MIDCONTINENT	THU		KØYML	146.97
37	HARRISBURG	WED	2100L		147.12
38	GUNDERSON PENN-JSY MIDCONTINENT HARRISBURG SAN ANTONIO DALLAS CITRUS FOUNDER'S	SUN	2030L		28650
41	DALLAS	SUN	0715L		
45	CITRUS	TUE	19301	VARIES	147.195
46	FOUNDER'S	THU	2030L	W2AUF	147.36
46	FOUNDER'S	SUN	0930L		3917
48	TREASURE COAST	DLY	1700L	K4QM	14.176
48	TREASURE COAST	DLY	0800L	K4QM	7153
49	ATLANTA	WED	2000L	VARIES	145.41
49	ATLANTA	SAT	1400Z		3857
51	TEX-LA GOLDEN TRGLI		1830L	W5HYD	146.70
52	MISSISSIPPI GULF CST		2000L		28.480
54	TYLER	SUN	0800L		3835
54	TYLER	MON		W5RRM	28.650
55	WISCONSIN	SUN	0830L		3985
58	COLORADO	SUN	0930L		146.07
58	COLORADO	SUN	0900L		3905
62	SUWANNEE	SAT	0900L		3940
63	CENTRAL OKLAHOMA		0800L	20 CA STATE STATE	3855
63	CNTL OKLAHOMA		1900L		145.41
64	EL PASO	SAT	0830L		3933
65	NIAGARA FRONTIER	SUN	1330L		3900
70	NATIONAL CAPITAL		2000L		147.03
73	SOUTHERN ONTARIO	SUN	0900L		3773
73	SOUTHERN ONTARIO	SUN	1300L		7088
75	CENTRAL CALIF. COAST		0800L		3917
76	BLUE RIDGE	SAT	1300L		3855
77	NORTHERN NJ	THU	2000L		147.285
	2000 (TATA TO DO AND THE OW)	900000			

1500	AND THE RESERVE OF THE SECOND	17.3.3.00 E		and in contrast of the last	10 mg - 15 mg
79	SUNFLOWER	WED	2100L	VARIES	146.82
81	LONG ISLAND	FRI	2130L	K2YAW	147.33
81	LONG ISLAND QCWA	SUN	1130L	W2TLC	3917
85	ARK-LA-TEX		2100L	VARIES	146.67
87	EVERGREEN	SUN	1500Z	VARIES	3984
89	PALMETTO STATE	SAT	0900L	W4DNR	3927
89	PALMETTO	SUN	1700L	N4LS	3695
91	VIC CLARK	SUN	0900L	W4QCW	146.79
92	NORTHERN LIGHTS	SUN	2000L	KL7CDG	146.97
94	ROADRUNNER	SUN	2000L	WB5YYX	146.72
95	EASTERN NEW YORK	SUN	1130L	WB1M	3900
96	GATEWAY	SAT	1600Z	W2KGI	3933
102	DAKOTA	SUN	0800L	VARIES	3889
104	TREASURE STATE	SAT	0830L	W7OTJ	3936
105	MIDDLE TENNESSEE	THU	2000L	WA4JJY	146.91
106	GERMAN		1700Z	VARIES	3669
106	GERMAN	TUE	1730Z	VARIES	3555
107	CENTRAL FLORIDA		1230L	W4LHP	14245
107	CENTRAL FLORIDA	SAT	0900L	W4LHP	7243
108	BEAVER STATE	WED		VARIES	3909
109	BATON ROUGE	SUN	2000L	VARIES	146.79
	BATON ROUGE	SUN		VARIES	3905
	KANSAS	SAT	1230Z	KAØRZO	3920
112	YANKEE	SUN	0830L	K1JJJ	3902
114	NORTH TEXAS	SAT	0830L	WA5BXH	3941.5 14295
120 122	QC WIRELESS WOMEN LAKE ERIE TRI-STATE	TUE	1900Z 0930L	K4KUU W3QPP	3915
123	LEE DEFOREST	SAT	0730L	KØDBW	3982
126	PIEDMONT	SUN	0845L	VARIES	3935
128	PELICAN		1600L	K9BSL	145.29
128	PELICAN	SAT	1000L	K9BSL	145.29
130	INLAND EMPIRE	SAT	0800L	W6HV	3862
130	INLAND EMPIRE	FRI	1600L	W6HV	3862
130	INLAND EMPIRE	WED	1930L	W6HV	1896
131	GULF COAST	TUE	0900L	WF4V	28750
	PINE TREE	SUN	1430L	VARIES	3942
	MID-MICHIGAN	TUE	2000L	VARIES	146.70
	CENTRAL NEW JERSEY		2200L	VARIES	147.045
140	WYOMING	SAT	0800L	W7MZW	3923
141	HI-PLAINS	SAT	0900L	W5MVJ	3933
142	NORTHWEST OHIO	WED	2000L	W8FO	146.79
	NORTH COLORADO	SUN	0830L	VARIES	145.115
146	TWIN STATE	SUN	0830L	WAINBI	3897
149	NUTMEG	SUN	1130L	WIKHL	3923
150	DEL-MAR-VA	SUN	0900L	K3PFW	146.82
151	WILD ROSE	MON	1900L	VARIES	3747
152	ROYAL PALM	MWF	1300L	W4LZV	7020
152	ROYAL PALM	T-TH	1300L	K4FA	141.78
154	LEO MEYERSON		1830L	W9VKC	145.480
157	PONY EXPRESS	SUN	0830L	WØGGP	3955
160	UTAH CHAPTER	SAT	1100L	VARIES	7272
162	SOUTHEAST WISC.		2100L	VARIES	147.87
164	BIG BEAR	SAT	1900L	N6EFT	147.33
165	YORK COUNTY PENN.		2100L	W3AXC	146.97
166	COLONIAL		1000L	W3TTW	147.21
169	SACRAMENTO VALLEY	DLY	0730L	VARIES	3854
170	CTRL WASHINGTON		1900L	VARIES	146.94
173	GOLDEN TRIANGLE	TUE	1900L	KS4LT	147.255
173	GOLDEN TRIANGLE	WED		KS4LT	147.255
181	HUDSON VALLEY	SUN	0815L	W2OZA	3917
181	HUDSON VALLEY		2030L	WA2RRK	147.060 146.76
182	NORTHEAST TENN.	SUN	2100L 1030L	W4VS W1ALL	3923
183	PIONEER	SUN	1830L	VARIES	146.64
184	BAY AREA		1900L	AB5OU	146.84
186 188	MESILLA VALLEY LOST RIVER		1930L	K7RFO	146.85
191	MONTEREY BAY		1930L	A A6T	146.70
191	HAWAII	1st S	1500L	VARIES	7088
197	TIMWAII	1303	LJOUL		

Member Classifieds

FOR SALE: Astron pwr sply 20A; Alinco DR-112 mobile w/mic; Kenwood TS-440S & TS-930S; Cushcraft R-4 vertical antenna. W3ND, 410 Lampost Ln., Camp Hill, PA 17011. (717) 761-7364

FOR SALE: Want a history of your amateur call? Name & address of each prior holder since 1912 - \$20. Bob Arrowsmith, K4JN, POB 166, Annandale, VA 22003. (703) 560-7161

FOR SALE: Heavy duty plate xfmr (Chicago xfmr), primary 105 to 125 volt, secondary 1560 volts, center tapped, 250 mA - \$40; matching filter 4 mFd, 1000V (2) - \$15. Above + UPS. Onerio Sabetto, W8PIU, 1717 Burgess Rd., Cleveland, OH 44112. (216) 481-1036

FOR SALE: Tubes, inexpensive, send SASE for list or call (908) 528-5296 after 9 PM. Don Gagne, W2LID, 626 Holly Hill Dr., Brielle, NJ 08730

FOR SALE: Beam TH36; CDR rotor w/control box; TS-830S, TR-4. All exc condx. Egon Timfold, 385 Overhill Dr., Hendersonville, NC 28792. (704) 693-7406

FOR SALE: Icom IC-2AT; Yaesu FT-703R, both exc. - \$100 ea; MFJ-207, new, never used - \$50; QST almost complete, from 1951 - BO; Hammarlund BC779 - BO. All + shpg. Dan, W2JCI, (201) 342-5743.

FOR SALE: Ten-Tec station, Scout 555, just back from factory checkup, seven band modules, model 937 pwr sply, model 700 hand mic, model 705 desk mic, mobile mount, model 607 paddle. Reason: Going QRP. You ship. Cost over \$950. First \$600 + shipping wins this bargain. #24736, J.F. Brumbaugh, P.O. Box 30, Salinas, PR 00751-0030. (W4LJD ex-KB4ZGC)

FOR SALE: Revised 180 books on radio & electronics, some collectors items, send SASE for list. W6IEG, POB 1244, Oakhurst, CA 93644

FOR SALE: 1900 Bunnell catalog; 1903 Mesco manual of Wireless; 1909 Phillips Code; 1910 Electro Importing Co. - \$15 ea ppd. Dr. Hess, W6CK, POB 19, Pasadena, CA 91102.

FOR SALE: General Radiotelephone CG-3 counter, generator -\$300; Western Electric 9-B 1930s Vintage Airline rcvr - \$800. Trades considered. Nick Oland, W3DSE, 821 Kenhorst Blvd., Reading, PA 19611. (610) 378-1411

FOR SALE: Ham home, 4700 sq. ft., ham shack, antennas. Pictures, features booklet to serious buyers, send \$5. W3BAG, Box 609, Braddock Heights, MD 21714. (803) 473-5825

FOR SALE: Electricty/telegraph radio books, 1895-1930 assorted wireless items, early tubes, keys, etc. SASE list. Jan D. Perkins, 524 Bonita Canyon Way, Brea, CA 92821.

WANTED: Schematic & parts list for Zenith Trans-Oceanic, "Royal 3000-1". Herb Sleeper, 8144 Carriage Ln., Wichita Falls, TX 76306. (817) 855-5820

WANTED: AVT-112A xmtr & conversion info; ARC-5/Command sets schematics/conversion info; AM modulator, mic, interstage & modulation xfmrs. Carl Sandstrom, Jr. W7CN, POB 1258, Bandon, OR 97411. (541) 347-9189

WANTED: Collins 5151, KWM-380, 75S3B/C; RME-9; Hallicrafters SX-88; Johnson Kilowatt; Squires Sanders rcvr. Steve, K6PFW, 848 N. Silverwood, Upland, CA 91786. (909) 985-1062

WANTED: Harvey-Wells T90, R9/R9A, APS90, Z-matcher. State price & condx. Herman Schnur, Rte 3, Box 151, Greenville, NC 27858. (919) 752-2264

WANTED: History & circuitry of Neutrowound Super Power rcvr manufactured in Homewood, IL in 1927. Robert Bowker, K6QT, 10445 Scotch Pines, Payette, ID 83661. (208) 642-3758

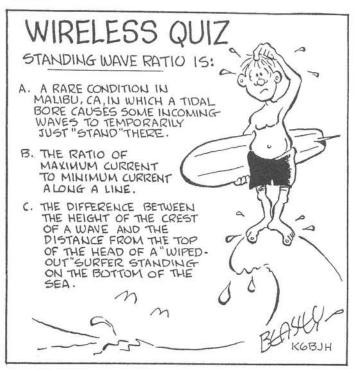
WANTED: Collins VFO/exciter or xmtr; T-824-B xmtr or RT618A xcvr; Heath (6m) HA-20; SX-88; RTTY books/crypto/equip; US Navy surplus. W5JV, 5678 College Dr., Baton Rouge, LA 70806-7217 or email W5JV@amsat.org

WANTED: Knight T-50 xmtr; Hammarlund HQ-145; bug; Dow-Key relay; Kelsey hand operated printing press/type. Don Trayes, WB4CVH, POB 2114, Winter Haven, FL 33883-2114. (941) 299-9227

WANTED: Ceramic "Bee hive" insulators. The kind that mount w/3 screws. Used is OK if not chipped or cracked. Arnold W. Sayre, HC 36, Box 14, Buckhannon, WV 26201. (304) 472-1629

WANTED: Schematic Atwater Kent Model 60C & parts list if available. George Guler, WØOIR, 206 Alanhurst Way, Sun City Center, FL 33573. (813) 634-9489; gguler@ij.net

WANTED: Schematic for Philco Radio model 42-390, code 121. R.W. Cummins, WA4GAW, 612 Huguenin Dr., Beaufort, SC 29902.



Please send ads to QCWA Journal, 14643 County Road G, Cortez, CO 81321 to arrive no later than 1 month prior to our publication dates. Ads may also be faxed to 970-564-9185.

Please limit ads to 25 words. Words are counted as follows: WANTED, FOR SALE, FREE, etc. count as 1 word; your address counts as 6 words.

Member Supplies

Certificates

Membership Certificates are numbered in serial order and are issued to each member. Numbers are not reissued except to the same member to whom they were first issued.

QCWA Gold Certificates celebrate the 50th anniversary of licensing. Issued without charge to eligible members upon proof of year of first license.

Gold Certificates are issued in five year increments; 55, 60, 65, 70 and 75 year certificates free of charge to eligible members.

Fifty Year Continuous Licensing Gold Certificate available to eligible members. Requires submission of proof of continuous licensing. There is a \$5 fee for this certificate. Applications are available from QCWA Headquarters.

QCWA Century Club Certificate is issued to QCWA members whose age, when added to their number of years as a QCWA member totals 100 or more. No charge for this certificate.

Meritorious Award Certificate is issued by Headquarters upon request of any active QCWA chapter. One such award is authorized for each chapter each year. The award may be given to recognize unusual dedication to QCWA or amateur radio. No charge for the award.

Operating Awards

QCWA Operating Award Certificates are issued to QCWA members by the Activities Manager. Proof of eligibility is required.

QCWA Worked 50 States Awards are issued to QCWA members who have contacted members in each state of the union.

QCWA Worked 100 Members Awards are issued to QCWA members who have contacted at least 100 QCWA members.

QCWA Worked 60 Chapters Awards are issued to QCWA members who have contacted members of 60 chapters.

QCWA Worked 500 Members Awards are issued to QCWA members who have contacted 500 QCWA members.

QCWA Lapel Pins

Without year tags, tie-tack, safety pin or screw type. Plain pins (no year) - \$10 With year tags (clutch-type only). Specify year; 25, 30, 35, 40, 45, 50, 55, 60, 65, 70 or 75 - \$15 QCWA Life Member pin - \$5

Other Member Supplies

QCWA Embroidered emblem - \$5
450 QCWA Red Stamps (regular) - \$3
450 QCWA Gold Stamps (life) - \$3
400 QCWA Yellow Stamps (50 Year) - \$3
QCWA Cap with logo - \$5
QCWA Chapter Banner - \$200
QCWA Decals - \$1
QCWA QSL cards - (see ad elsewhere)

Please send your order to QCWA Headquarters, 159 E. 16th Ave., Eugene, OR 97401-4017. Phone (inquiries only, no orders): 541-683-0987, Fax 541-683-4181 We do not accept orders charged to credit cards.

14 195.00 305

FT-1000MP

Revolutionary All-Mode HF Transceiver with EDSP™

 Enhanced Digital Signal Processing (EDSP™) Noise Reducer, RX/TX waveform Contour shaping control, Digital Notch plus IF Notch, Digital CW Narrow Filters, Microphone Equalization • Shuttle Jog™ Tuning Enhancement • Directional Tuning Scale for CW/Digital Modes and Clarifier Offset Display • Selectable Antenna Jacks • Programmable Tuning Steps • 100W PO • Dual In-band Receive with Separate S-meters • Built-in Collins® SSB Mechanical Filter • CW Electronic Keyer with two Key jacks • CW Spot • Automatic Antenna Tuner · 100-117, 200-234V AC and 13.5V DC power inputs • DC version available • 99 Memories.

FT-1000/D

Elite-Class All-Mode HF Transceiver

- 200W PO Dual Receive 108 dB dynamic range
- · Cascaded IF Filters · Direct Digital Synthesis (DDS) • IF Width/Shift/Notch • CW Spot • CW Audio Peaking Filter • CW Electronic Kever with two Key jacks • IF Noise Blanker • Automatic Antenna Tuner • RF Speech Processor • Front panel RX Antenna selector switch . Two large flywheel-weighted tuning knobs • 99 Memories.

FT-990 High Performance All-Mode **HF** Transceiver

- Outstanding Cost-Performance Dual VFOs with Direct Digital Synthesis (DDS) . Band Stacking
- VFO System Dual SCAF Filter Automatic Antenna Tuner • Front Panel RX Antenna Selection • RF Frequency-Shifted Speech Processor
- CW Spot/Pitch Control/Electronic Keyer • IF Noise Blanker • IF Shift/ Notch • DC Version Available • 90 Memories.

FT-900C/AT

Deluxe Compact HF Transceiver

- Detachable Front Panel Design
 100W PO Built-in Collins® SSB
- Mechanical Filter Automatic Antenna Tuner IF Shift/Notch Keypad Frequency Entry • Duct
- Flow Cooling System Digital Metering • Adjustable CTČSS Tones



High Performance Compact HF Transceiver

- · High Receiver Dynamic Range
- · Dual Band Stacking VFOs with Direct Digital Synthesis (DDS) • 100W PO
- · IF Shift · IF Noise Blanker · Digital Mode Interface • CW-Reverse feature
- Adjustable Repeater CTCSS Tones
- · Optional (External) Automatic Antenna Tuner • 100 Memories.

FT-600

Multi-Purpose HF SSB Transceiver

Frequency Range: RX: 50 kHz - 30 MHz; TX: 160-10M • 100W PO • MIL-STD 810 Rating • Alphanumeric Omni-Glow™ LCD Display • Keypad Frequency Entry · Optional CW (500 Hz) and AM (6 kHz) filters available • Dual Watch · Front-mounted Speaker with High Audio Output • PC Programmable 100 Memories (in 4 banks of 25).







Choice of the World's top DX'ers

For the latest Yaesu news; hottest products, visit us on the Internet! http://www.yaesu.com

©1997 Yaesu USA, 17210 Edwards Road, Cerritos, CA 90703, (562) 404-2700 Specifications subject to change without notice. Specifications guaranteed only within amateur bands Some accessories and/or options are standard in certain areas. Check with your local Yaesu dealer for specific details. Collins is a Registered trademark of Rockwell International Corporation